

# REPORT TO THE EMCDDA by the Reitox National Focal Point

# THE NETHERLANDS DRUG SITUATION 2014

FINAL REPORT AS APPROVED BY THE
SCIENTIFIC COMMITTEE

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#### Colophon

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#### **Disclaimer**

This 2014 report of the Netherlands drug situation to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has been written for a broad public of readers. With regard to drug legislation and drug policy, for reasons of comprehensibility, the original legal and policy texts were not always reviewed literally in this report. For a literal review, the readers of this 2014 report about the drug situation in the Netherlands will have to consult the original legal and policy texts.

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#### **Preface**

The Report on the Drug Situation in the Netherlands 2014 has been written for the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Each year, national centres of expertise on drug-related issues in the member states of the European Union ('Focal Points') draw up a report on their respective national drugs situation, according to guidelines provided by the EMCDDA. These reports form the basis of the "European Drug Report" compiled by the EMCDDA. In keeping with the guidelines, the report focuses on new developments in the reporting year. In order to avoid too much overlap, the reader is repeatedly referred to previous National Reports.

This 2014 national report was written by the staff of the Bureau of the Netherlands National Drug Monitor (NDM) at the Trimbos Institute and staff of the Research and Documentation Centre (WODC) of the Ministry of Security and Justice. The NDM was established in 1999 on the initiative of the Ministry of Health, Welfare and Sport. The Ministry of Security and Justice also participates in the NDM. The NDM carries out the functions of the Netherlands Focal Point.

The NDM relies on the contribution of a multitude of experts and input from registration systems and monitors in the Netherlands. In particular, the authors would like to thank the members of the Scientific Committee of the NDM and other expert reviewers for their valuable comments on the draft version of the report.

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# **Executive summary**

Developments in drug law and policies (chapter 1)

#### Drug laws

This National Report reviews the developments in the drug policy of the Netherlands up to November 2014. The Dutch Opium Act places drugs with an unacceptable risk on Schedule I and places other drugs on Schedule II. The Opium Act, the Opium Act Directive and other drug-related Acts and Codes have been subject to changes:

- A new article to the Opium Act is approved by Parliament (article 11a), which aims at criminalization of activities that prepare or facilitate the professional and large-scale illegal cultivation and trafficking of cannabis. The article will come into force on 1 March 2015.
- The Residence criterion became part of the national criteria for non-prosecution in the Opium Act Directive of the Public Prosecutor. The enforcement of this criterion at local level may be implemented in phases.
- In 2011, an advisory committee advised to classify cannabis with a THC concentration of more than 15% as a hard drug. Implementation was announced in the plans of the new Cabinet (Rutte II) of November 2012. The procedure is still pending.
- A change in the Code of Criminal Procedure is in preparation which will make it possible for the police to apply compulsory tests of alcohol and drug use on suspects of violent crimes.
- The approaches of offenders with addiction problems, mental health problems or intellectual disabilities are in a process of change. The new Forensic Care Act aims at an improvement of the interconnection between the criminal justice system and the system of care and cure facilities outside prison. This Act is in parliamentary procedure.
- An amendment of the Road Traffic Act is approved by both Houses of Parliament by which the arrest and prosecution of driving under the influence of drugs and under the influence of a combination of drugs and/or alcohol is facilitated.
- The new Chronic Care Act will replace the existing General Exceptional Medical Expenses Act. Most of the treatment for clients with substance abuse problems should be reimbursed under the Health Care Act and the Community Support Act.

## **Drug Policies**

- The priorities in investigation and prosecution lie with import and export, professional production, large-scale trafficking and organized crime in relation to drugs. The organized crime in relation to heroin, cocaine, synthetic drugs and cannabis/cannabis cultivation is qualified as a threat for the Dutch society and gets high priority in the period 2012-2016. Special teams were installed in 2014 to combat the so-called 'undermining criminality', the criminality in which there is interweaving of legal facilities and facilitators with the criminal underworld..
- The prison system should have more attention for the prevalence of addiction problems among detainees and co-operatie intensively with addiction care outside prison. It is expected to present a plan for improvements on this theme per 1 January 2015.

The Measure of Placement in an Institution for Habitual Offenders (ISD) is effective –
with a small effect - and cost-effective. Placement of young adults (18-24 year old) will
be stimulated in pilots. The government considers a longer duration (more than 2 years)
of the Measure ISD.

Developments in drug use in the population and specific target groups (chapter 2) There are no new data on drug use in the general population.

Data from several school surveys (including the HBSC study) showed a downward trend in cannabis use, albeit with fluctuations, since the middle of the nineties. The lifetime prevalence of cannabis use among pupils of 12-16 years from secondary eduction decreased from 16% in 2003 to 9% in 2013. For the other drugs (not included in the HBSC), prevalence rates of drug use peaked in 1996, decreased afterwards and seemed to stabilise between 2007 and 2011.

Ecstasy (after cannabis), remains without any doubt the number one illegal nightlife drug among young people and young adults, especially at dance events, and there are indications of an increase in popularity (or 'normalisation'). In Amsterdam, current use among clubbers and ravers in 2013 was 55% (43% for clubbers and 69% for ravers). In 2008 that was 21% for clubbers. A national survey in the same year found that one in three (35%) frequent partygoers, festivalgoers and clubbers (with a predilection for techno and house music) were current ecstasy users. The more often they attended parties or festivals, the greater the chance of ecstasy use. Reports on health incidents (see chapter 6) appear not to have affected the positive image of ecstasy in nightlife.

Amphetamine use is considerably more common in these club and party visitors than in the general population, but less often than ecstasy. Among Amsterdam clubbers and ravers, the popularity of this substance - after a drop in 2006 - rose sharply again.

New psychoactive substances are used appreciably less often among partygoers than 'classical drugs, but that nonetheless there are "small clusters of people with a curiosity for these NPS". Among clubbers and ravers in Amsterdam, the lifetime prevalence of use is 15% for 4-fluoramphetamine, 9% for mephedrone<sup>1</sup>, 5% for 6-APB ("BenzoFury'), 4% for methylone, and 3% for methoxetamine.

#### Developments in prevention (chapter 3)

Drug prevention activities aim to discourage drug use, support early detection, facilitate referral to regular treatment and reduce drug-related health risks. Dutch drug prevention policy is part of a broader scope of public health prevention, co-ordinated by the Ministry of Health, Welfare, and Sport (VWS) and implemented by local government. In the latest National Prevention Program (NPP) 2014-2016 formulated in 2013, the focus regarding substance use remains on prevention among young people and on healthy and safe nightlife with regard to alcohol, drugs, and tobacco.

- An additional school doctor/nurse visit in adolescence is being implemented to facilitate early identification of problems, including substance abuse.
- The minimum age to buy alcohol and tobacco, and to consume alcoholic beverages in public spaces increased from 16 to 18 years as of 1 January 2014.

<sup>&</sup>lt;sup>1</sup>Strictly speaking, mephedrone is not a new psychoactive substance after its listing on May 2012 on Schedule 1 of the Opium Act.

- This was accompanied by a campaign to strengthening the social norm to 'not smoke and drink under eighteen' (Nix18).
- In addition, the general smoking ban in hotels, bars and restaurants (now including small bars with no personnel but the owner) was effectuated on 10 October 2014.

Drug prevention policy is developing in the context of more general health care reorganizations, towards decentralization and transition to less intense forms of care. Prevention is still mainly undertaken by local authorities and include interventions for schools, nightlife, youth care, and education of teachers, youth care professionals, GPs and personnel in nightlife settings to improve early identification of substance use problems. How reorganizations will affect universal prevention activities of Public Health Services and Addiction Care is yet to be established, though social neighborhood teams will play a larger role in selective prevention. Indicated prevention is now a task for GPs and General Practice Mental Health Workers (POH-GGZ), rather than prevention departments of institutes for addiction care. Relapse prevention remains part of specialized addiction care.

All municipalities had to draw up a prevention and enforcement plan for the regulation of the Licensing and Catering Act before July 1, 2014. They may link age restrictions to opening hours, impose restrictions on happy hours and special alcohol offers, and regulate sales of alcohol in sport club canteens and other such venues by local ordinance. The website "www.loketgezondleven.nl" provides information on effective public health interventions to support municipalities in providing coherent and effective local health promotion. A recent survey among the municipalities (66% response rate) indicated that 44% had formulated such policy in time and most others expected to complete it in 2014.

The Healthy School and Drugs (HSD) is the oldest school-based drug prevention program, which was recently evaluated at secondary schools. As it is currently implemented, it was found ineffective and is therefore being revised. First Aid services at large dance parties still exist, as well as the national alcohol and drug information lines. The anonymous drug test service of the Drug Information and Monitoring System (DIMS), as well as the monitor for drug-related emergencies (MDI, using data from First Aid services) directly communicate public health risks within their networks to enable fast prevention responses. These sources report an increased number and severity of ecstasy-related health emergencies at first aid posts (MDI) and an increased proportion of ecstasy tablets with high MDMA concentration (DIMS). Together with indications of a high prevalence of ecstasy use among partygoers and other subpopulations of young people and young adults in the nightlife scene (chapter 2), this contributed to the initiation of several preventive actions and research activities, including the assessment of factors that contribute to (reckless) alcohol and drug use among contemporary youth (in night life).

#### Developments in high risk use (chapter 4)

The number of problematic opiate users has been estimated in 2013 at 14,000, implying a decrease of 21% compared to the previous estimate for 2008-2009. This decrease is consistent with other indicators, including a decrease of opiate users in treatment and overall ageing population with low levels of new users recruited.

A very rough national estimate of the number of (dependent) crack users, based on extrapolation of data from three cities to national level, arrives at a number 17 and 24 thousand. This population may overlap to a considerable extent with the population of opiate users as 50% to 80% of the crack users may also consume opiates.

While health and treatment indicators point at an increase in the number of problem (dependent) GHB users, the size of this population is not known.

#### Developments in treatment (chapter 5)

On the 18<sup>th</sup> of June 2012, the Ministry of Health, Welfare, and Sport (VWS) and the providers of mental health care and addiction care signed an agreement aimed to secure the future of mental health care and addiction care in the Netherlands. To keep the mental health care and addiction care affordable in the near future, it was agreed to reduce the number of inpatient units (slots) by a third in 2020 compared to 2008. A third of the inpatient care will then have to be replaced by outpatient care, which will require more self-management from the clients. To put the agreement with the ministry into practice, the National Branch Organization for Mental Health Care and Addiction Services (GGZ Nederland) has issued a vision document that targets a more assertive prevention of drug use; focuses on youth, vulnerable groups, and neighbourhoods at risk; and aims to consolidate the care for chronic addicts.

In 2013, the regular addiction care was provided by thirteen institutes and registered anonymously in the National Alcohol and Drugs Information System (LADIS). During the past decade, about half of the institutes for addiction care had merged with an institute for general mental health care. With regard to the number of treated clients, the fusions have had no large impact on substance abuse treatment. The number of new drug clients in the addiction care (TDI definition) increased with 3% from 10,801 new drug clients in 2012 to 11,129 new drug clients in 2013. But from 2011 to 2012 there was a decrease of 5%. These small fluctuations in the addiction care parallel the stabilization of the number of drug patients in the hospitals during the past three years. The decrease in the number of drug clients in the addiction care in 2012 could have resulted from the own private contribution which the clients would have to pay initially in this year. However, no such own private contribution was announced for the hospital care. All in all, these findings might point at a stabilization of the number of problem drug users.

By 2011, the quality management program Scoring Results had established 27 products, and for 24 of these products it was found that the implementation rate was high for 10 products, moderate for 7 products, and low for 7 products. Based on cognitive behavioral therapy, the protocols for the life-style trainings reached an implementation rate of not less than 100%. Several products which Scoring Results in 2013 added to its quality management products are the "Practice-based recommendations for GHB detoxification", the advisory report "Elderly and addiction", and the quick scan "Scoring results around recovery".

# Health correlates and consequences (chapter 6)

The incidence of HIV and hepatitis B and C among (ever) injecting drug users remains low since many years. Risk behavior (injecting and exchange of injecting material) is (very) low. In the Netherlands, HIV is mainly transmitted through sexual contact (both through men who have sex with men (MSM) and heterosexuals) and drug users only play a marginal role in new infections. The disease outcome of HIV in IDUs is however worse than in the other risk groups and the proportion of AIDS patients dying is highest in the risk group IDUs. Also the burden of chronic hepatitis C infection stays high among (current and former) IDUs.

Data on drug-related health emergencies show that the sharp increase in ecstasy-related emergencies at large parties, described in the previous national report, now seems to be levelling off. This is despite the finding of a still increasing proportion of ecstasy pills with high MDMA concentration. Also for GHB, an increase in emergencies has been observed in hospitals and forensic doctors, up to 2012, which did continue in 2013, but on a much lower level than in the previous years, also indicating a possible leveling off. Emergencies after use of new psychoactive substances are hardly reported and there are no indications for a substantial underreporting of serious events with these new drugs.

New data are presented in this national report on the high co-morbidity of several mental health disorders, mainly ADHD, and drug use or drug use disorders.

The number of acute drug-related deaths remained low. Between 1996 and 2012, the annual number of recorded drug-related deaths among residents fluctuated between a minimum of only 94 cases in 2010 and a maximum of 144 cases in 2001. In 2012, 118 cases were recorded, including 28 cases relating to opiates, 22 to cocaine and 68 to unspecified substances. The latter category mainly includes death due to multiple substance use, commonly including illicit substances as well as combinations with alcohol and/or medicines. The ageing of the population of problem drug users is reflected in a decreasing percentage of the deceased aged under 35 years, from 60% during the period 1991 up to including 1995 to 29% during the period 2006 up to including 2012.

#### Responses to health correlates and consequences (chapter 7)

In response to the acute emergencies after (recreational) drug use, the monitor for drug-related emergencies (MDI) collects since 2009, in a standardized format, information on acute emergencies related to drug use, and uses this information as direct input for preventive measures, both at the level of the professionals in the field as for policy makers. In recent years, the close collaboration with the Drugs Information and Monitoring System (DIMS) has proven to be very fruitful in identifying the recent disturbances on the ecstasy market (high MDMA concentrations) and the monitoring of new psychoactive substances. Based on the monitoring information collected, prevention workers develop interventions directly targeting drug users or increasing knowledge and skills of professionals working with drugs users. Recently, a training was developed addressing aggression and violence under the influence of drugs.

With regard to the prevention and treatment of drug-related infectious diseases, the number of exchanged needles and syringes has been rather stable since a couple of years. The available signs indicate that those drug users in need of these harm reduction measures have access to them. Injecting drugs is no common practice in the Netherlands at the moment. Drug and alcohol consumption rooms are available in some cities, but not in all. The number of drug consumption rooms has been reduced in the last couple of years, among others because other projects have substantially reduced the number of homeless people and therefore the need for a quiet place for drug use is less, as many drug users are now also able to use in their own home.

Treatment for HCV in IDUs is not yet common practice, but a project run in 2013 and 2014 showed again that treatment is feasible. This so called "break through" project gave a boost to hepatitis C screening and treatment in the 10 participating teams. The project collected best practices which will be spread through other locations in addiction care in the coming years.

#### Social correlates and social reintegration (chapter 8)

In the Netherlands, the social reintegration of (former) addicts is part of the more general Strategy Plan for Social Relief that has targeted all kinds of vulnerable people. The results of this Strategy Plan are monitored each year by the *Strategy Plan for Social Relief Monitor* (Monitor Plan van Aanpak Maatschappelijke Opvang). It was found that in 2012, similar to 2011, about 3,500 adult homeless people demanded social relief in the four largest cities given by Amsterdam, Rotterdam, The Hague, and Utrecht. However, the proportion of homeless people who were actually offered an individual care trajectory had decreased from 56% in 2011 to only 41% in 2012.

Drug-related crime, prevention of drug-related crime and prison (chapter 9)

#### Opium Act offences

- There is a slight decrease in the number of suspects of Opium Act offences reported by the police in 2013. In 2012 there were 18,851 and in 2013 18,268. The Public Prosecutor also registered less cases of Opium Act offences: 18,200 in 2012 and 17,130 in 2013. The decrease in numbers is in line with the general decrease in the number of criminal cases in the justice system. The proportion of Opium Act cases, however, increased: from 7.6% in 2012 to 8.3% in 2013 of all suspects in the police reports; and from 8.0% in 2012 to 8.2% in 2013 of all cases registered at the Public Prosecutor.
- The decrease in absolute numbers concerns mainly hard drug offences. The number of soft drug offences stabilized more or less (8,985 in 2012 and 8,966 in 2013). The increase of soft drug related offences in police arrests and cases registered at the Public Prosecutor, which was observed in recent years, stopped in 2013.
- 22% of the cases is sentenced by the Public Prosecutor and 20% of the cases is dismissed (for policy or technical reasons). Most Opium Act cases are submitted to court (57% in 2013). Cases with hard drugs are more often submitted than cases with soft drugs.
- In 2013 the number of court sentences in Opium Act cases is almost 9,800. There is an increase compared to 2012, of hard drug cases as well as of soft drug cases. The judge applied more community sentences in Opium Act cases (more than 3,600) than (partly) unconditional prison sentences (about 3,300) in 2013. Prison sentences are applied more in cases with hard drugs, community sentences more in cases with soft drugs. The proportion of Opium Act cases handled by the judge increased (from 8.5% to 8.8%).
- 17% of the detainees is imprisoned for an Opium Act offence (on 30 September 2013). This percentage does not differ from 2012.
- Criminal recidivism (after a sentence) of Opium Act offenders with a new Opium Act offence is 7% after one year and 28% after ten years.

#### Offences committed by drug users

 Drug-using offenders commit mainly property crimes (without violence) and violent crimes. Most of them are male and 35-54 years old. This pattern is quite constant over the years.

- Of the very frequent offenders 65% suffers from addiction problems. Although this proportion is decreasing, it is still the main problem among this group.
- There are several interventions available for offenders with drug problems in the criminal justice system. They are subject of multidisciplinary case meetings in the Safety Houses, where trajectories are planned for them. Diversion to care facilities outside prison as an alternative for imprisonment or additional to imprisonment is one of the core elements in the approach. More attention for addiction problems and case finding among detainees is stimulated, in addition to continuing preventive policies toward drug possession and drug use in prisons. There are specialized addiction probation services available and accredited behavioural interventions. Addiction probation services registered more clients (more than 21,000 in 2013 and about 17,700 in 2012). Offenders with drug problems also belong to the target group of the ISD-measure; a majority of the ISD-population has addiction problems.

## Drug markets (chapter 10)

#### Coffee shops

The Opium Act Directive of the Public Prosecutor contains criteria for non-prosecution of coffee shops (no advertising, no sale or presence of hard drugs, no nuisance, no sale or presence of youngsters under the age of 18, no transaction to customers of more than 5 grams and no more than 500 grams in stock). Since 2013, the residence criterion was added (and the private club criterion was abolished). The residence criterion forbids entrance to the coffee shops for non-residents of the Netherlands. Its actual implementation is subject to local decision making. Most municipalities did include the residence criterion in their policy, but decided not to enforce it actively in practice. Some did not include it in their policy. Other do enforce it in practice, but the intensity of enforcement varies a lot. Most of them take a lenient approach and permit exceptions to a limited extent.

In 2012, many residents turned away from the coffee shops, when the private club criterion was in force. They returned largely to the coffee shops in 2013, after the private club criterion was abolished. The recovery, however, certainly falls short of 100%.

Illegal cannabis sales, which increased significantly in 2012 after the introduction of both the private club and the residence criteria, was tempered in 2013, but remains greater than before the introduction of both new criteria.

#### Cannabis cultivation and 'quality'

In 2013, 5,962 cannabis cultivation sites were dismantled, more than in 2012, when there were an estimated 5,773. The perceived availability of cannabis (by cannabis users) in the Netherlands is high, cannabis is easy to obtain.

Legal options for regulation of cannabis cultivation for the supply of the coffee shops were subject of political debate and discussion in 2013 and 2014. The Government announced not to change the law in this respect. A study concluded that international treaties leave no room for legalization or regulation of cannabis cultivation, besides for medical and scientific purposes.

The average levels of THC (the major active ingredient of cannabis) of Dutch-grown weed and imported hash has been relatively stable these last few years. The average THC

potency of Dutch-grown weed in samples sold in coffee shops was 14.6% in 2014 and fluctuated between 13.5% (2013) and 17.8% (2010) in the last five years. For imported hash this was 14.9% in 2014, varying between 14.3% (2011) and 19.0% (2010). THC levels of 15% or more (to be forbidden if an amendment proposing that cannabis with 15% or more THC will be placed on Schedule I), were found in 50% of Dutch-grown weed samples and 56% of samples of imported hash, but in none of the imported weed samples.

The export of Dutch cannabis was estimated using multiple mathematical models for the production and consumption of cannabis. On the basis of these models, the total production of cannabis in the Netherlands amounts to between 53 and 924 tons (when the consumption of Dutch cannabis by non-residents is defined as domestic consumption) and to 92 to 937 tons (when the consumption of non-residents is defined as export). In percentages this is 31% to 96% and 54% to 97% resp. A Monte Carlo-simulation was performed to estimate a 95% confidence interval in addition to the lower and upper limits of the mathematical models. This method relies on additional assumptions regarding the within-variable distribution of values. The Monte Carlo-simulation produced a most likely range for the estimated export of Dutch cannabis, taking into account the assumptions and uncertainties. On the basis of this method, the most likely range is 206-549 tons or 78% to 91% (when the consumption of Dutch cannabis by non-residents is defined as domestic consumption) and 231-573 tons or 86% to 95% (when the consumption of non-residents is defined as export).

#### Synthetic drugs

In 2012 and 2013, the National Facility for the Support of Dismantlements was active in more dismantlements of production locations for synthetic drugs than in 2011. Mostly the dismantlement concerned amphetamine laboratories or APAAN-conversion laboratories. But there was also an increase in the number of MDMA-related production locations. The Facility signals the (re)introduction of (new) production processes and pre-precursors, and the production and operation of new psycho-active substances. Yields are enlarged by optimization of the processes and production hardware. APAAN and pre-precusors for PMK were seized. Furthermore, more dumpings of waste from production of synthetic drugs were reported.

On the consumer market, the increase in the average quantity of MDMA in ecstasy pills between 2010 and 2012 continued in 2013. In 2013 a laboratory-tested MDMA pill contained an average of 111 mg. The highest measured dose was 366 mg. The amphetamine content of speed powders fluctuated considerably between 2008 and 2012. From 2012 to 2013 a strong rise was reported in the average content of amphetamine from 27% to 47%. The caffeine levels showed a downward trend.

The price users had to pay for a gram of amphetamine in the past few years has gone up, but appears to have stabilised between 2012 and 2013 (approximately 8 euros per gram on average). The price of ecstasy pills appears to have gone up too and amounted to an average of 4 euros in 2013, which is more than in 2008 and 2009 (2 and 3 euros, respectively).

# Part A: New developments and trends

# 1 Drug policy: legislation, strategies and economic analysis

#### 1.1 Introduction

This National Report reviews the developments in the drug policy of the Netherlands from November 2013 up to November 2014.

Dutch drug policy has two cornerstones: to protect public health and to combat public nuisance and drug-related crime (T.K. 24077-259; T.K. Handelingen 2011-2012-69). In the current Opium Act Directive the objective of the drug policy is described as: 'The [new] Dutch drugs policy is aimed to discourage and reduce drug use, certainly in so far as it causes damage to health and to society, and to prevent and reduce the damage associated with drug use, drug production and the drugs trade' (Stc 2012-26938).

#### 1.2 Legal framework

#### Laws

In the Netherlands, only a few laws and regulations are primarily directed towards drugs, but many other laws with a broader scope are important in relation to illegal drugs:

#### Drug laws and regulations

- Opium Act (Opiumwet) (criminal law)
- Opium Act Decision (Opiumwetbesluit) (Royal Decree)
- Opium Act Directive (Directive of the Public Prosecution Service)
- Victor Act (Wet Victor) (administrative law)
- Regulation Heroin Treatment (ministerial regulation)
- Regulation Opium Act Exemptions (ministerial regulation)

Laws and regulations with a broader scope but important for illegal drugs

- Prisons Act (Penitentiaire Beginselenwet) (criminal law)
- Conditional Release Act (criminal law)
- Placement in an Institution for Habitual Offenders Act (Plaatsing in een inrichting voor stelselmatige daders – ISD) - (criminal law)
- Directive for Criminal Proceedings for Adult Frequent Offenders (Richtlijn voor strafvordering bij meerderjarige veelplegers)
- Abuse of Chemical Substances Prevention Act (Wet Voorkoming Misbruik Chemicaliën)
   (chemical precursors administrative law)
- Public Administration Probity Screening Act (Wet bevordering integriteitsbeoordelingen door het openbaar bestuur or Wet BIBOB) - (money laundering – administrative law)
- Health Insurance Act (Zorgverzekeringswet) (health law)

- Medicines Act (Geneesmiddelenwet) (health law)
- Collective Prevention Public Health Act (Wet collectieve preventie volksgezondheid) -(health law)
- General Exceptional Medical Expenses Act (Algemene Wet Bijzondere Ziektekosten) -(health law)
- Community Support Act (Wet Maatschappelijke Ondersteuning WMO) (health law)
- Plan of approach for social relief (Plan van aanpak maatschappelijke opvang) (policy letter)
- Forensic Care Act (Wet Forensische Zorg) (criminal law)
- Compulsory Mental Health Care Act (Wet Verplichte Geestelijke Gezondheidszorg) health care
- Road Traffic Act (Wegenverkeerswet)
- Admittance of Care Institutions Act (Wet Toelating Zorginstellingen (WTZi) (health care law)

In addition, there are policy letters with regards to the combat of organized crime (Bestrijding Georganiseerde Misdaad) and with regards to the drug policy. These letters give the strategic framework for laws and regulations.

#### The Opium Act

Dutch legislation is consistent with the provisions of all the international agreements which the Netherlands has signed, i.e. the UN Conventions of 1961, 1971 and 1988, and other bilateral and multilateral agreements on drugs. The Netherlands has made the following reservation concerning the United Nations Convention of 1988: "The Government of the Kingdom of the Netherlands accepts the provisions of article 3, paragraph 6, 7 and 8, only in so far as the obligations under these provisions are in accordance with Dutch criminal legislation and Dutch policy on criminal matters."<sup>2</sup>

The Dutch Opium Act (1928), or Narcotics Act, defines the illegal drug-related activities and the sanctions that can be applied. It was fundamentally changed in 1976, when a distinction was made between drugs presenting unacceptable risks (Schedule I) and drugs like cannabis (Schedule II), which were seen as less dangerous. Since then, the Opium Act has been amended on various occasions but its basic structure has been maintained.

There are two procedures to place substances on the Opium Act Schedules: the 'normal' procedure by way of a governmental decree (algemene maatregel van bestuur) - which takes at least a few months- and an emergency procedure, giving the Minister of Health the possibility to place a substance immediately on an Opium Act Schedule.

#### Legislative initiatives with regard to the Opium Act

In 2011 an advisory committee advised to categorize cannabis with a THC-concentration of more than 15% as a hard drug (Schedule I of the Opium Act) (Expertcommissie Lijstensystematiek Opiumwet, 2011). According to the committee, cannabis and hashish with

<sup>&</sup>lt;sup>2</sup>(http://www.minbuza.nl/producten-en-diensten/verdragen/zoek-in-de-verdragenbank/1988/12/003363.html; voorbehoud Koninkrijk der Nederlanden,10 maart 1999).

a THC content in excess of 15 percent increases the risks for public health. Transferring high potency cannabis to Schedule I means that the punishments for trafficking and cultivating heavy cannabis will be increased and that coffee shops can only sell less potent varieties of cannabis. The procedure to place cannabis with a THC-concentration of 15% or more (this is how it is phrased in the amendment) on Schedule I (hard drugs) started on 26 March of 2013. The procedure is still pending.

The standing committee of Health of the House of Representatives had two rounds of written consultations with the Secretary of State of Health, Welfare and Sports and organised a roundtable conversation with cannabis experts on this subject in the reporting year (T.K. 33593-2, 3, 4). According to the government the amendment of the Opium Act is necessary to prevent health damage and to reduce large scale cultivation of cannabis by increasing the criminal risk. According to the government, the coffee shop exploitant is responsible for only selling in his shop cannabis with a THC concentration below the proposed legal limit. They are allowed to possess analytical equipment in their coffee shops to determine THC content. However, most of the consulted experts think that it is nearly impossible to determine the exact THC content of small samples of cannabis as this requires advanced laboratory facilities Moreover, different analytical methods give different results. The procedure in Parliament is still pending.

In July 2011 a bill was sent to Parliament which proposed a new article in the Opium Act to criminalize preparative and facilitating activities for the illegal cultivation of cannabis (Stc. 2011-13125; T.K. 32842-2, 3). 'Illegal cultivation' is defined as the professional and large-scale production of cannabis and is meant to cover the whole production process of cannabis, including the trafficking and export (T.K. 32842-3). The bill aims largely at grow shops, who sell equipment for cultivation and are facilitators of cultivation. The bill was approved by the House of Representatives in 2013 (T.K.-Stemmingen Opiumwet-69-15, 2013).

On 11 November 2014 the Senate passed this bill. After publication in the Bulletin of Acts, Orders and Decrees, everybody who can suspect that the service he provides or the product he sells to a person is facilitating professional and large scale cannabis cultivation or trafficking, can be prosecuted. According to the Minister of Security and Justice, this measure will have impact on the organised crime behind the cannabis cultivation, and in particular on the 56 grow shops and other professional facilitators. This bill will come into force on 1 March 2015.

The Minister of Security and Justice repeated several times that regulation of cannabis cultivation is not allowed under the international treaties and that the Dutch government is not willing to regulate. A scientific study of the Radboud University Nijmegen concluded that the international treaties do not leave any room for legalization or regulation of cannabis cultivation (Van Kempen and Fedorova, 2014).

The Minister argues that 80% of the domestic production of cannabis is exported and that regulation of production for the supply of coffee shops is no solution to the problems of organized crime, trafficking and export (E.K. 32842-B, J).

In 2012, the national police estimated the export to be between 48% and 97%, with 85% as most probable estimate (Jansen, 2012). This estimate was validated by the WODC in 2014 (Van der Giessen et al. 2014). These authors conclude that the export ranges between 78% and 95%, depending on the definitions used. For more information see Chapter 10.

A new guideline for the Criminal Proceedings of Opium Act offences is in preparation and is planned to be operational on 1 March 2015.

Legislative initiatives in relation to drug law offences and substance use

#### - Road Traffic Act

The bill to change article 8 of the Road Traffic Act passed both Houses of Parliament (T.K. 32859-9,16; E.K. 32859-A). By the amendment the arrest and the prosecution of driving under the influence of drugs and under the influence of a combination of drugs and/or alcohol is facilitated. After two expert reports, it was decided to differentiate between single drug use, multiple drug use and combined drug and alcohol use. For each specific type of drug (amphetamine, methamphetamine, MDMA, MDEA, MDA, THC, cocaine, morphine and GHB) one limiting value is determined. For single drug use so-called behavior related limits are determined. For combined drug use and for the use of one or more drugs in combination with alcohol, so-called analytic or zero limits are tolerated. These limits can not be absolutely zero, because measeument errors has to be ruled out, very low limits of most of these substances are naturally produced by the body or can be metabolites of a drug used days before. Preselection of cases will take place by the police on the basis of a saliva test. Only blood test values can be used to report an offence (T.K. 32859-16; Adviescommissie Analytische Grenswaarden, 2014; T.K. Handelingen 2014-94-28)

#### - Forensic Care Act

The Forensic Care Act, which creates an new system of forensic care, is approved in the House of Representatives and is now (November 2014) discussed in the Senate (E.K. 32398 I, J). The core of the new system is to strengthen the connection between the prison system, compulsory and quasi-compulsory forensic care within the criminal justice framework, the compulsory (after)care and the regular voluntary mental health (after)care. Target group of the Act are delinquents with psychiatric problems, addiction problems or mental handicaps. Places in care facilities outside prison are purchased by the Ministry of Security and Justice and are reimbursed on the basis of performance. The budget for forensic care increased from about €494 million in 2009 to about €643 million in 2012 (E.K. 32398- I), but the general budget cuts in the penitentiary system which are being carried out will have consequences for the forensic care (Van Gemmert and Van Schijndel, 2013). Concentrations of forensic care could be a consequence (Nederlandse Zorgautoriteit, 2013).

#### - A compulsory test of substance use in cases of violent offenses

A change in the Code of Criminal Procedure is in preparation. In November 2013 a bill was sent to the House of Representatives which offers the police and the Public Prosecutor the option to oblige violent offenders to co-operate with a test on their use of alcohol or drugs while committing the violent offence (T.K. 33799-1, 2, 3). The use of narcotic substances can in principle be used as a possible penalty aggravating factor. Furthermore it can lead to the application of conditional sanctions like behavioural interventions or other specific conditions aimed at changes in the behaviour of the offender (T.K. 33799-5). Information campaigns will be coupled with the change of law.

The Council of State was critical about the bill. The additional value in relation to the existing practice of sanctioning is not clear, according to the Council, because the use of substances is playing a role already in the sanctioning of these offenders. Counterproductive effects could occur when the test would become a necessary condition to discount the use of substances in the penalty. The Council also notices that there is insufficient evidence for a causal relation between substance use and violence or for a preventive effect (T.K. 33799-4).

-Dutch position on proposed European regulation on New Active Substances (NPS)

On 17 September 2013, the Commission adopted legislative proposals and a Directive to enable the EU to act swifter and more effectively to address new psychoactive substances. It wants more control on the risks assessment on NPS and more rights to forbid substances in the whole European Union. The Dutch government is not convinced of the necessity and the correctness of this proposal (E.K. 33823 A, E). The regulation is still under discussion by the Horizontal Working party on Drugs.

#### - New act for chronic care

On January 1, 2015 the existing General Exceptional Medical Expenses Act will be replaced by the new Chronic Care Act (Wet langdurige zorg). Clients of the addiction care who are on 1 January 2015 continuously for three years staying in addiction care facilities will be reimbursed under this new act. All other clients needing addiction care should be reimbursed under the Health Care Act and the updated Community Support Act. In 2012 and 2013 Administrative Agreements were closed on the future of mental health care in the Netherlands, including addiction care. In 2020, the number of hospital beds needs to be reduced by a minimum of 30% compared to 2008. There is also a transition towards Primary Mental Health Care for treating clients with less severe mental health (including substance use) disorders. Clients with mental health problems fulfilling criteria of a fullblown disorder and more complexity will be treated by the Secondary Mental Health Care. The General Practitioner and the General Practice Mental Health Worker are supposed to treat clients with mild substance use problems (Van Laar et al., 2014).

For more information see chapter 5.

#### Medicinal cannabis

Since 2001, the Office for Medicinal Cannabis (OMC) is the Dutch government office which is responsible for the production of cannabis for medical and scientific purposes and only delivers the raw material (http://www.cannabisbureau.nl/en/). Four types of medicinal cannabis are available through pharmacies: Bedrocan, Bedrobinol, Bediol and Bedica. A fifth type is being developed. There is still no official "cannabis medication" produced and registered by a pharmaceutical company. The OMC was exploited cost-effective in 2010. Some Dutch health insurance companies reimburse medicinal cannabis in certain circumstances (T.K. Aanhangsel-2461). According to the Dutch Foundation for Pharmaceutical Statistics medicinal cannabis was in 2012 11,000 times supplied to 2,000 different patients. That was an increase of about 30 per cent in comparison with 2011<sup>3</sup>. In

<sup>3</sup>http://www.pw.nl/rubrieken/sfk/apotheken-verstrekken-meer-cannabis.

2013 more than 500 kilo was delivered to Dutch patients (T.K. 24077-317). The last years about 100 kilo of medicinal cannabis is exported to Italy, Finland and Germany.

In 2014 Spirocan, a joint venture between Bedrocan BV and Zorg Innovaties Nederland BV. was founded. Its mission is to to develop and provide a new pain medication based on cannabis for patients worldwide (http://www.spirocan.com/).

#### Report on Scletoria (hallucinogenic truffles)

In 2008 hallucinogenic mushrooms were placed on Schedule II of the Opium Act. In 2013 there were some health related emergencies among tourists in Amsterdam who had used scletoria (the tuber or truffle of hallucinogenic mushrooms), which are not forbidden. The Coordination Centre for the Assessment and Monitoring of New Drugs (CAM) was asked by the Ministry of Health, Welfare and Sports to prepare an information report (not a risk assessement) in order to obtain more insight in the healths effects of these substances, which are mostly sold in so-called smart shops. From this investigation it became clear that the scletoria truffles contain the same psychoactive substances as hallucinogenic mushrooms (paddo's): psilocybine and psilocine. The conclusion of the report is that the use of scletoria is less risky than the use of hallucinogenic mushrooms (CAM, 2014). This conclusion was adopted by the government which decided not to take supplementary measures on this issue (T.K. 24077-318).

#### Implementation of Laws

Changes in the Opium Act Directive

A new guideline of the Public Prosecutor concerning the criminal procedure of khat, which was placed on Schedule II of the Opium Act in 2013, came into effect in January 2014 (Stc 2014-2267). Only large scale traders will be punished with prison sentences.

#### Implementation of the Act 'Institution for Habitual Offenders' (ISD)

Since 2004, the Act 'Placement in an Institution for Habitual Offenders (Plaatsing in een inrichting voor stelselmatige daders – ISD)' can be applied by the Judge in cases of habitual offending (Stb 2004-351). ISD is an alternative for standard imprisonment. A habitual offender can be confined to ISD for at most two years. The primary objective of the ISD is to reduce the public nuisance caused by extremely persistent offenders. Another objective is to reduce recidivism by offering treatment and rehabilitation.

The ISD-measure is carried out at 10 locations (one for women). There is no common way of working, but the general trajectory of an ISD-conviction includes (in most cases) a preparatory phase, followed by an intramural and an extramural phase and aftercare.

- The Directive of the Public Prosecutor in cases of frequent offenders changed per January 1 2014 (Stc 2013-35061). Definitions were adapted: not the number of police reports, but the number of offenses (ten in five years) is decisive for an offender to be subject to ISD. More high-frequent offenders qualify for the ISD now.
- In 2013 there were between 392 and 463 offenders under the ISD measure (mean = 431). Each month, 16 (mean) new offenders are convicted to the ISD. 15% stayed in the regular prison regime in 2013 (without behavioural interventions), 47% attended behavioural interventions in prison, and 38% stayed in forensic treatment or care outside prison, mostly

residential treatment (Inspectie Veiligheid en Justitie 2013; Van Laar et al. 2014). The mean age of ISD-convicted offenders is 40 years and they have 60 former criminal antecedents when they are convicted to the ISD (Tollenaar et al. 2014).

- The ISD-locations are being decentralised. This is implemented with the aim to improve
  the connection to local and regional organizations in the preliminary phase and during
  aftercare. It also could increase professionalization. But it implies that some ISD-locations
  have only a small number of ISD-convicted between larger numbers of other detainees,
  which makes it more difficult to implement specific interventions for ISD-offenders
  (Inspectie Veiligheid en Justitie 2013).
- The Secretary of State of Security and Justice concluded on the basis of two studies into the effectiveness of the ISD (see Chapter 9) that the ISD is a suitable and effective measure for the target group, which can be characterized as a complex multi-problem group (T.K. 31110-16). He also concludes that there are no improvements between the group that left the ISD before 2009 and the group that left in 2009 and 2010. This could be expected, because the ISD was undergoing improvements since 2008. The effectiveness will therefore be monitored further.
- The Secretary of State also announced a further exploration of judicial options and financial implications in the first half of 2015, as a reaction to a cost-effectiveness study (T.K. 31110-16). For more information about this study: see Chapter 9.
- Another study investigated why young adults (18-24 years) are underrepresented in the ISD and how this could be improved, especially for the ones that commit high impact crimes (Pröpper et al., 2014; T.K. 31110-15). The study revealed that only 1.9% of the young high-frequent offenders get an ISD-measure. Their problems are multifold. 52% has addiction problems. The negative image of the ISD and a lack of cooperation between organisations cause the low rate.
- The Minister of Security and Justice announced better information about the ISD to the
  organisations involved and pilots to increase the number of young high-frequent offenders
  in ISD (T.K. 31110-17).

More information see Chapter 9.

Public Administration Probity Screening Act (Wet BIBOB) (see also chapter 9)

In 2013 the scope was enlarged to the gambling sector, the complete real estate sector, the fireworks sector and to the transportation of strategical commodities. Municipalities can apply for a BIBOB advice for all kind of licenses and exemptions (Landelijk Bureau Bibob, 2014).

The actual screening is conducted by a special central BIBOB-office. This office has access to secured sources such as the police files and the Tax and Customs Administration. The central BIBOB-office cooperates closely with the Regional Centres for Information and Expertise (RIEC's). The BIBOB office not only inspects the antecedents of the applicant, but also checks his or her immediate environment. This may result in a recommendation about the degree of risk. Dutch administrative authorities may refuse contracts, subsidies or permits for organisations and companies if they have serious doubts about the integrity of the applicant. In 2011 the BIBOB-office received an order of the Minister of Security and Justice to carry out a national screening of coffee shops. As part of this project, 110 coffee

shops were screened in 2012 and 2013. Besides this, in 2013 54 BIBOB advices referred to coffee shops and 4 to smart and grow shops. Many screened coffee shops were judged to be 'very dangerous' (Landelijk Bureau Bibob, 2014).

Most of the BIBOB screenings are meticulous, useful and legally sound (Kwaliteitscommissie Bibob, 2014).

See also chapter 9.

#### 1.3 National action plan, strategy, evaluation and coordination

#### 1.3.1 National Drug Strategy

The National Drug Strategy focusses on public health and the combat of drug-related crime and nuisance and has two pillars: demand reduction and supply reduction.

An important element of the national drug strategy of the Rutte II Administration in the last years is the cannabis policy. The main points are:

- 1. The government intends to bar non-residents from the Dutch coffee shops. The Residence criterion is an integral part of the coffee shop policy.
- 2. The enforcement of the Residence criterion will be implemented in stages and will be locally tailored. The local triangles of Public Prosecutor, Police and Mayor decide how and when this the Residence criterion will be enforced.
- 3. The police will be tough on illegal street trading of drugs (including cannabis).
- 4. The government intends to place cannabis with a THC content of more than 15% on Schedule II of the Opium Act, making that kind of cannabis a hard drug (see also § 1.2).
- 5. The production of cannabis will not be regulated (T.K. 24077-314).

Due to a merge of ministries, the number of Ministries directly involved in the drug policy from five to three. Only the Ministries of Security and Justice, Health, Welfare and Sports and Foreign Affairs consult each other on this subject, coordinated by the Ministry of Health, Welfare and Sports (T.K. 24077-316).

#### 1.3.2 Strategy toward coffee shops and cannabis cultivation

Core issues of the recent approach toward coffee shops include(1) the resident criterion as a measure to curb drug tourism and (2) the combat of professional and organized cannabis cultivation (E.K. 32842-J).

The resident criterion: the Opium Act Directive of the Public Prosecutor contains criteria for non-prosecution of coffee shops ('tolerance criteria': no advertising, no sale or presence of hard drugs, no nuisance, no sale or presence of youngsters under the age of 18, no transaction to customers of more than 5 grams and no more than 500 grams in stock). Since

2013, an additional criterion entered into force for the whole country: the resident criterion. This criterion forbids entrance to the coffee shops for non-residents of the Netherlands (Stc. 2012-26938). Its actual implementation is subject to local decision making (T.K. 24077-293, 309, 310).

For resuls of the evaluation study see Chapter 9.

The combat of organized crime related to cannabis: since September 2014, the combat of organized and 'undermining crime' (crime with interweaving of the illegal underworld with legal facilities and legal facilitators) has been intensified. Dedicated police capacity is brought together in special teams in the South of the Netherlands (E.K. 32842-I, J). One of the priority areas is cannabis cultivation.

The export of Dutch cannabis was estimated using multiple mathematical models for the production and consumption of cannabis. On the basis of these models, the total production of cannabis in the Netherlands amounts to between 53 and 924 tons (when the consumption of Dutch cannabis by non-residents is defined as domestic consumption) and to 92 to 937 tons (when the consumption of non-residents is defined as export). In percentages this is 31% to 96% and 54% to 97% resp.

A Monte Carlo-simulation was performed to estimate a 95% confidence interval in addition to the lower and upper limits of the mathematical models. This method relies on additional assumptions regarding the within-variable distribution of values. The Monte Carlo-simulation produced a most likely range for the estimated export of Dutch cannabis, taking into account the assumptions and uncertainties. On the basis of this method, the most likely range is 206-549 tons or 78% to 91% (when the consumption of Dutch cannabis by non-residents is defined as domestic consumption) and 231-573 tons or 86% to 95% (when the consumption of non-residents is defined as export).

#### Consequences of the new strategy in Belgium

The Belgian government announced to sharpen the policy with regard to the possession of cannabis. The Dutch Minister of Security and Justice and his colleagues of France, Luxemburg and Belgium will present an action programme in order to intensify the cooperation in the combat of drug related crime in the near future. The existing measures against drug related crime and nuisance in border regions will continue (T.K. 24077-333). A motion (which was accepted) in Parliament requested the Minister to promote that municipalities apply more restrictive measures against drug tourism besides the resident criterion (TK 24077-327).

Strategies with regard to cannabis cultivation for the supply of coffee shops
Legal options for the regulation of cannabis cultivation for the supply of the coffee shops
were subject of debate and discussion in 2013 and 2014 (T.K. 24077-299-302, 307, 2013;
T.K. 24077-315, 317, 323, 324, 325, 330).

• The Minister of Security and Justice invited municipalities with coffee shops to elaborate their plans to solve the existing public nuisance problems, under the condition that proposals to regulate cannabis cultivation should remain within the existing legislation. 25 Municipalities reacted (with 21 plans; T.K. 24077-310, 314,; EK 32842-F, blg 281611).

- In January 2014 a 'wiettop' (a conference about domestic cannabis cultivation) was held
  in Utrecht and 35 mayors of municipalities with coffee shops signed a "Manifest Joint
  Regulation" in which they plea for regulation of cannabis cultivation for the supply of
  coffee shops, in order to reduce nuisance and crime and increase safety and health of
  cannabis users (Manifest, 2014). In November 2014, more than half of the mayors of in
  total 103 municipalities with coffee shops supported the plans for regulation (T.K. 32842J).
- The Minister of Security and Justice, in his reaction, pointed out that the UN Drugs Conventions leave no room for regulation or legalization (T.K. 24077-310, 314, 315, 316, 317).
- Research concluded that, from a legal perspective, cannabis cultivation intended for
  recreational use cannot be placed under any exception under the UN Drugs
  Conventions, and the cultivation for the supply of coffee shops cannot be implemented
  on the grounds of the legal arguments provided by Dutch municipalities with due
  observance of the UN Drugs Conventions and the EU legal instruments (Van Kempen
  and Fedorova, 2014).

#### 1.3.3 Combat of organized and undermining drug related crime

The priority in investigation and prosecution policy lies with organized and large-scale professional trafficking and/or production of heroin, cocaine, synthetic drugs and cannabis (T.K. 29911-79). In the reporting year, the efforts were intensified (T.K. Aanhangsel-408; E.K. 32842-H, I, J; T.K. 29911-93).

- Dedicated police capacity (125 persons) was brought together in special teams which
  operate in the South of the country where the problems are most urgent. Among the (in
  total three) priority areas are cannabis cultivation and synthetic drug production. These
  teams focus primarily on short-term and direct interventions ('short hits') in combination
  with confiscation of criminal proceeds.
- At the same time, police and Public Prosecutor aim at an increase of further investigations into organized crime networks in relation to (a.o.) cocaine, heroin, synthetic drugs and large-scale cannabis cultivation and trafficking (T.K. 29911-79; T.K. 24077-321; RIEC and LIEC 2014).
- The Dutch police and Public Prosecutor also participate in international Joint Investigation Teams and, with regard to synthetic drugs, in the European Empact project (T.K. 29911-91).
- Regional Information and Expertise Centers support municipalities and provinces in their administrative approaches toward organized crime (RIEC and LIEC 2013; Openbaar Ministerie and Politie 2014; RIEC and LIEC 2014). Participants of RIECs are – besides municipalities - National Police, Public Prosecutor, tax authorities, customs, Fiscal Investigations Unit, provinces, Military Police, Immigrations and Naturalizations Unit, social security units. RIECs are supported by a National Information and Expertise Centre (functioning since 2011).
- Special attention is recently given to large-scale dumpings of waste of the production of synthetic drugs and cannabis (T.K. 29911-91).

For more information see Chapter 9.

#### 1.3.4 Offenders with high rates of crime and/or psychosocial problems

- Safety Houses: the target group of offenders with complex problems is subject of case
  consultations in the 'Safety Houses' in which police, probation workers and municipalities
  are represented. These multidisciplinary teams make plans for the approach. The Safety
  Houses work according to a common basic framework since 2013 (Ministry of Security
  and Justice, 2013).
- Addiction probation services: the cooperation with the penitentiary system is intensified, services are provided during imprisonment as well as during return to society (www.svg.nl).
- Enforcement strategies aim with priority at frequent offenders who cause public nuisance and commit high impact crimes (T.K. 31110-15).
- The ISD is a measure for this target group.

For more information see Chapter 9.

### Drug trafficking through the Internet

One of the priorities in the fight against organized crime is directed to illegal digital (drug) trade and other activities. Already 743 fte of the national police is occupied with digital criminal investigations. The Team High Tech Crime (119 fte) is specialized in complicated cyber crime. Because cyber crime is almost always internationally organised, the Dutch Public Prosecution Office initiated the European project Illegal Trade on Online Marketplaces (ITOM). In 2014 arrests were made to suppliers of drugs using the Internet fora Utopia, Silk Road and Black Market Reloaded (T.K. Aanhangsel-2427; T.K. Aanhangsel-282).

#### 1.4 Economic analysis

No integrated studies have been conducted recently into drug-related public expenditures. Nonetheless, some new (albeit fragmentary) information is available about the expenditures that are made by the regular institutes for addiction care. There is also some information available about expenditures for Opium Act offences by the criminal justice system.

#### Public expenditures on addiction care

In the Netherlands, institutes for addiction care are financed in a complex way from different resources. As a rule, the institutes receive their funding from the Ministry of Health, Welfare, and Sport; the Ministry of Social Affairs and Employment; the Ministry of Security and Justice; the provinces; the municipalities; the health insurance companies; additional temporary funds; and some private funding. For all these funding sources, it is not clear beforehand which part of the funding will ultimately be spent on addiction care. In other words, the expenditures on addiction care are not earmarked. However, by means of the annual accounts of some institutes for addiction care, an indirect estimation can be made of the total expenditures.

In the Netherlands in 2012 and 2013 there were still seven regular institutes for addiction care that had not merged yet with an institute for mental health care. One more institute for addiction care still publishes its own annual account, although it merged with the mental health care. Based on the most recent annual accounts for either 2012 or 2013, these eight institutes had spent a total of about 539,454,600 euros per year. According to the National Alcohol and Drugs Information System (LADIS), in which all these eight institutes participate, these institutes had given treatment to 82% of all the addiction clients (IVZ, personal communication 26-08-2014). The remaining 18% of the addiction clients had been treated in an institute for which no annual account is available about specifically the addiction care. Nonetheless, by extrapolating the available information, it can be estimated that the total expenditures on addiction care will have amounted to about 657,871,500 euros per year. The proportion of the drug clients being 48% (Wisselink et al. 2014),<sup>5</sup> it can be roughly estimated that a total of about 315,778,300 euros has been spent on treating drug addiction. It should be noticed that this amount also includes the funding of the drug addiction care by the Ministry of Security and Justice.

This estimation does not yet include the costs of the care and treatment that addicts receive outside the regular addiction treatment, the costs of addiction treatment in institutes for mental health care only, and the costs of addiction treatment given by private clinics.

Public expenditures for Opium Act offences in the criminal justice system

The costs for prevention, police investigation, prosecution, sentencing, implementation of the sentence, support of offenders and victims and judicial services have been calculated (Moolenaar, Van Rosmalen, Vlemmings & Van Tulder, 2014).

Opium Act offences are a relatively small category of expenditures compared to property crimes, public order crimes and violent and sexual crimes. The expenditures have been decreasing since 2009 from over 364.9 million Euros (in 2009) to 311.9 Euros in 2012 (figures are corrected for increases of prices and income). Compared to other activities, most expenditures are made for the implementation of sentences. Hard drugs offences cost more than soft drug offences (in 2012: 268.7 million Euros for hard drug offences and 81.1 million Euros for soft drug offences). The ministry of Security and Justice also receives money from fines or confiscations of criminal proceeds.

<sup>&</sup>lt;sup>4</sup>www.jaarverslagenzorg.nl.

<sup>&</sup>lt;sup>5</sup> http://www.sivz.nl/nl/ladis/kerncijfers.

# 2 Drug use in the general population and specific targeted groups

#### 2.1 Introduction

Drug use in the general population has been assessed in the National Prevalence Survey on substance use every four years between 1997 and 2009 (for data see previous national reports). Since then, changes in data collection methods precluded reliable estimates of drug use. However, in the framework of the national coordination and integration of monitoring systems on lifestyle behaviors, core data on drug use will be collected annually as of 2014 in the General Health Questionnaire by Statistics Netherlands, without suffering from the limitations of the prior assessments (e.g. low sample size and low net response rate). New prevalence data are expected in 2015. Moreover, every four year a more detailed assessment on substance use, including drug use, will be carried out in the context of an additional Lifestyle Monitor.

In the previous (2013) National Report, data were presented on estimates of the total amount of cannabis consumed in the population. These estimates were based on detailed data on consumption patterns of different types of users combined with data on the prevalence of cannabis use from the latest (2009) population survey. More recently, these estimates were further refined to estimate the amount (and proportion) of home grown Dutch cannabis exported abroad, as commissioned by the Minister of Security and Justice (Van der Giessen et al., 2014; see chapter 10).

There are several sources to monitor substance among pupils in the Netherlands (HBSC, ESPAD, Dutch School Surveys). New data included in the current National Report concern cannabis prevalence rates among pupils collected in the context of the 2013 HBSC study. Overall, drug use shows a slowly decreasing trend over the past decade.

In previous reports, additional information has been included on drug use in a variety of targeted populations, with a focus on the nightlife scene. In the current 2014 report, new data from on substance use among clubbers and ravers in Amsterdam will be described. Chapter 8 also describes drug use among homeless people, people with a mild intellectual disability, and male and transgender sex workers.

#### 2.2 Drug use in the general population

There are no new data on drug use in the general population (ST01). General population surveys showed that recent and current drug use remained overall stable between 1997 and 2005. A change in data collection method in 2009 (shift from CAPI to CASI) precluded the determination of trends between 2005 and 2009, and in subsequent years. As indicated in the previous paragraph, new data will be available in 2015.

#### 2.3 Drug use in the school and youth population

Drug use among pupils

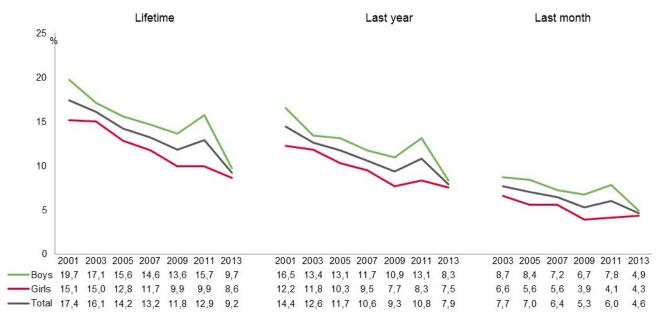
Since 1988, substance use is monitored every four years among pupils of primary education (7<sup>th</sup> and 8<sup>th</sup> grade) and all grades of 'mainstream' secondary education (Dutch School

Surveys on substance use). The most recent survey was conducted in 2011. Among pupils from primary education, questions on illegal drug use were restricted to cannabis. Methodological details have been described in the 2012 National Report and in the Standard Table ST2\_2012\_NL\_01.

- Overall, prevalence rates of drug use among pupils of secondary education (12-18 years) peaked in 1996, decreased afterwards and remained stable between 2007 and 2011.
- In 2011, lifetime prevalence of cannabis use among 12-18 year old pupils was 17% and last month prevalence 8%. ESPAD data for 15-16 year olds showed that the last month prevalence of cannabis use was about twice the European average (14% versus 7%, respectively).
- Of the other drugs, lifetime use of ecstasy remained highest and use of heroin remained lowest over all years (2.6% and 0.6%, respectively in 2011).

In addition, as of 2001, during the years in between these Dutch school surveys, the Netherlands participated in the Health Behaviour of School-aged Children (HBSC) study among pupils of 11-16 years, conducted under the auspices of the WHO. This survey includes questions on cannabis use, which were largely similar with those of the Dutch School Surveys. Data were analysed for a selection of pupils of 12-16 years in the first four grades of secondary education to allow a description of trends in cannabis use up to 2013.

Figure 2.1 Pupils' (12-16 years) lifetime and last year cannabis use between 2001 and 2013, and last month prevalence between 2003 and 2013 by gender.



Sources: HBSC (2001, 2005, 2009, 2013). Dutch School surveys on substance use (2003, 2007, 2011) (De Looze et al., 2014)

Figure 2.1 shows trends in lifetime and last year use of cannabis between 2001 and 2013, and trends in last month prevalence between 2003 and 2013 by gender.

- There is a downward trend among pupils from year 12-16 years until 2009, a (nonsignificant) increase in 2011, followed by a decrease in 2013.
- In 2003 16% of the pupils of 12-16 years had experience with using cannabis; in 2013 this proportion was 9%. Current use went down from 8% to 5% in this period.
- Differences between 2003 and 2013 were statistically significant and were observed in all age groups.
- The gender differences were rather stable, with male adolescents consistently (and significantly) showing higher prevalences. Surprisingly, no gender differences in cannabis use were found anymore in 2013.
- The percentage of who pupils have experience with cannabis at a very young age (14 years) decreased from 19% in 2003 to 8% in 2013.

## 2.4 Drug use among targeted groups

In previous national reports, higher levels of drug use, especially more intensive patterns of drug use, have been reported among various subpopulations, including socially excluded groups like problem youth, homeless people (see also chapter 8) and the prison population. Apart from these marginalised groups, drug use is usually also higher among partygoers and other subpopulations of young people and young adults in the nightlife scene.

In the 2013 National Report, findings from a web survey among 3,335 (frequent) visitors of parties, festivals and clubs aged between 15 and 35 years were summarized. In brief, the data showed that substance use was much more prevalent in this population compared to the age matched general population (Goossens et al. 2013). Especially the prevalence of use of ecstasy appeared to be high: last year prevalence was 61% and last month prevalence 35% (cf. for cannabis these figures were 52% and 33%, respectively). Moreover, the more often people attended parties, the higher the risk of using drugs and tobacco. The findings of this survey, together with the increased number and severity of ecstasy-related health emergencies at first aid posts (see chapter 6) and the increase in ecstasy tablets with high MDMA concentration (see chapter 10), have attracted a lot of policital and media attention and have led to several preventive actions and research activities (see chapter 3). In this report, new data will be described from a a local monitor describing trends in substance use among nightlifers in Amsterdam. The results of this survey confirm the fairly high (and increased) use of certain party and club drugs among specific populations of

It should be noted that (trends in) illegal drug use may differ between geographic regions in the Netherlands, and results from local studies, such as Amsterdam, cannot be interpreted as being representative for the Netherlands as a whole.

## Nightlifers in Amsterdam

young adults in the nightlife scene.

Since 1993, the Amsterdam Antenna combines qualitative and quantitative research methods to monitor drug use in the city of Amsterdam among adolescents and young adults. The Antenna monitors by means of "a mixed-method monitoring scheme" (Nabben et al.

2014).<sup>6</sup> The three components of the Antenna are a panel study, a survey, and prevention indicators. The panel consists of drug users and other "insiders from various scenes".

In 2013, a total of 633 clubbers and ravers<sup>7</sup> filled in an online survey, 44% of them were in their early twenties, 75% were ethnic Dutch, and 66% were students or secondary school pupils. With regard to the nightlife, Amsterdam in 2013 saw "mounting numbers of students in the city" and a revival of "raves", which are parties at alternative locations that are not fully legal. For the different drugs, the Antenna in 2013 observed the following:

- With regard to cannabis, the panel in the past years observed a decline in the number of active cannabis smokers. Nonetheless, the survey showed that still 48% of the clubbers and ravers are current cannabis smokers. On the other hand, the survey confirmed that between 1995 and 2013 the proportion of nightlifers using cannabis during the nightlife decreased from 31% to 16%, and the proportion of hazardous users decreased from 18% to 8%. Hazardous cannabis use was defined as "smoking daily or having more than one joint on several days a week".
- With regard to ecstasy, some fatal incidents related to this drug were reported in the media during 2013. Nonetheless, the panel noticed that "incidents like these have failed to dent the positive image that ecstasy has for its users", and the "availability of ecstasy is unwaveringly high, as is the purity of the tablets". The survey confirmed that 55% of the clubbers and ravers are current ecstasy users, the highest prevalence ever seen since 1995. Moreover, "the total intake of MDMA per occasion is probably higher than ever due to the increased potency of the tablets".
- With regard to amphetamines, the panel observed that the previous "negative image
  attached to amphetamine has turned to enthusiasm, with users in the panel now calling it
  (in addition to ecstasy) the ideal party fuel to fire people up at festivals, raves and
  afterparties". The survey adds that 23% of the clubbers and ravers are current users of
  amphetamines, the highest level ever observed since 1995.
- With regard to *cocaine*, the panel observed that this drug has remained popular among older nightlifers ageing above 25 years. According to the survey, 19% of the clubbers and ravers are current cocaine users.
- With regard to *anaesthetics*, the prevalence has strongly increased between 2008 and 2013. The proportion of current users increased in this period for *laughing gas* from 3% to 33%, for *GHB* from 5% to 10%, and for *ketamine* from 2% to 12%.
- With regard to new psychoactive substances, the panel observed that these drugs have remained less popular than classical drugs like cannabis, ecstasy, amphetamines, and cocaine. Nonetheless it was observed that there are "small clusters of people with a curiosity for novel psychoactive substances". The survey reveals the following proportions of ever users of the new drugs: 19% for 2-CB, 15% for 4-FA, 9% for mephedrone, 5% for 6-APB, 4% for methylone, and 3% for MXE.
- With regard to psychedelic drugs like LSD, the panel has noticed that such drugs still
  play marginal roles, but "interest in LSD appears to be increasing slightly, now that the
  drug is popping up at outdoor festivals outside the original niches where it was taken".

<sup>&</sup>lt;sup>6</sup> http://www.jellinek.nl/wp-content/uploads/2014/06/Antenne-2013.pdf.

<sup>&</sup>lt;sup>7</sup> Raves were defined as "(quasi) illegal parties at alternative (non conventional) locations, organised by different organisations and networks.

## 3 Prevention

## 3.1 Introduction

The Netherlands' drug policy aims to discourage and reduce drug use, certainly in so far as it causes damage to health and to society, and to prevent and reduce the damage associated with drug use, drug production and the drugs trade (Stc 2011-11134). Drug use prevention policy is embedded in a broader public health prevention policy and coordinated by the Ministry of Health, Welfare, and Sport (VWS). Local authorities further develop and implement these drug use prevention policies (Public Health Act 2008, T.K. 31316-3), mostly in co-operation with prevention departments of institutes for addiction care, municipal health services, schools, neighborhood centers, and national health promoting institutes.

The most recent Dutch policy papers on health prevention are "Health close to people" (T.K. 32793-2) and the National Prevention Program (NPP) 2014-2016 "Alles is gezondheid..." (Ministry of Health, Welfare, and Sport 2013). As described in more detail in the National Report 2013, these policy papers advocate a more central role for prevention in health care in general. The prevention priorities identified in these policy papers are: diabetes, depression, tobacco use, harmful alcohol use, obesity and sedentary lifestyle. Whereas the NPP states that healthy behavior is considered the responsibility of individual persons, and not a primary task for the national government, responsibility to provide professionals and citizens with reliable, accessible information is taken. In addition, the Ministry of Health, Welfare, and Sport primarily takes a facilitating and coordinating role to stimulate prevention through co-operation between a wide variety of stakeholders. Over 90 stakeholders have pledged to commit themselves to self-defined goals related to the NPP.

Regarding substance use (alcohol, drugs, and tobacco), the NPP mentions the importance of strengthening a healthy and safe nightlife. Municipalities have a predominant responsibility in this domain, but the Ministry of Health, Welfare and Sport facilitates and supports their role.

Several changes announced in the NPP have been implemented:

- The minimum age to buy alcohol and tobacco, and to consume alcoholic beverages in public spaces increased from 16 to 18 years as of 1 January 2014.
- The national government has deployed a campaign aimed at strengthening the social norm of 'do not smoke and do not drink under eighteen' (Nix18).
- The general smoking ban in hotels, bars and restaurants (now including small bars with no personnel but the owner) was effectuated on 10 October 2014.

Drug prevention policy is developing in the context of more general health care reorganizations (see § 5.2), for which decentralization and transition are key words. The government aims to organize decentralized, tailored care and support 'close to citizens', i.e. organized by municipalities within neighborhoods. Transition refers to relying more strongly on citizens' own responsibility, self-care and social network; providing government support as final option, thus reducing the intensity of care. Costs are also expected to be reduced by

improving efficiency; as care is provided 'closer to people', the co-operation between care providers is expected to become more efficient.

The 2012-2013 Administrative Agreements on the future of mental health care, including addiction care (see § 5.2) are in line with these developments, stating that the number of hospital beds in mental health care needs to be reduced, and the treatment of people with milder problems will be transformed into Primary Mental Health Care (Basis GGZ).

Prevention aimed at the general population (universal prevention) and at risk groups (selective prevention) are still mainly undertaken by local authorities under the Public Health Act (WPG) and the Community Support Act (WMO). This includes interventions for schools, nightlife, youth care, and education of teachers, youth care professionals, GPs and personnel in nightlife settings to improve early identification of substance use problems (Ruiter et al., 2014). How reorganizations will affect universal prevention activities of Public Health Services and Addiction Care is yet to be established, though social neighborhood teams will play a larger role in selective prevention. As of 1 January 2014, *indicated* prevention is a task for GPs and General Practice Mental Health Workers (POH-GGZ), rather than prevention departments of institutes for addiction care. With this reorganization, individual prevention departments within specialized addiction care will partly disappear. An exploratory study concludes that it is important that these 'new' prevention providers are sufficiently equipped for their novel tasks. Relapse prevention remains part of Secondary Mental Health Care (Ruiter et al., 2014).

To support coherent and effective local health promotion, the website "www.loketgezondleven.nl" provides information on effective interventions for municipalities, schools, and healthcare workers. This website is maintained and updated by the Centre for Healthy Living (Centrum Gezond Leven) of the National Institute on Public Health and the Environment. It includes a database of lifestyle interventions and guidelines, categorized around the (NPP) fields school, neighborhood, and work. It also includes the Guideline Healthy Municipality (Handreiking gezonde gemeente), for which the drugs issue was updated in 2014. Every four years, local governments revise their prevention policy. The guideline can support municipalities in this policy cycle from evaluation to implementation. It includes interventions, examples of best practices, checklists, and advices. In addition to municipalities' current prevention partners, co-operation with employers and health-insurances will be intensified according to the Program agenda.

## 3.2 Environmental prevention

Environmental prevention strategies aim at altering the immediate cultural, social, physical and economic environments in which people make their choices about drug use.

### Alcohol

The Dutch government aims to tackle alcohol abuse and diminish social and personal costs of alcohol abuse, including harmful effects of excessive alcohol consumption on health, aggression in pubs and clubs, and traffic accidents as a result of drunken driving. The focus on young people's alcohol use, stated in the National Prevention Program, is reflected in

recent alcohol legislation developments, implementing higher age limits, stricter laws, and more excise duty.

On January 2014, the minimum age for supplying alcoholic beverages was raised to 18 years. Individuals under the age of 18 years possessing alcohol in public places (with the exception of shops) are punishable by law as of January 1, 2014 2014 (Stb. 2013-457; Stb. 2014-15). All municipalities must have drawn up a prevention and enforcement plan for the regulations of the Licensing and Catering Act before July 1, 2014. A recent survey among the municipalities (66% response rate) indicated that 44% had formulated such policy in time (Stap, 2014). Most other municipalities planned to finish the alcohol prevention and law enforcement policy in 2014; regional cooperation had delayed the process, but was deemed needed to improve the quality of the policy. The control of compliance with the rules has been transferred from the Netherlands Food and Consumer Product Safety Authority (Nederlandse Voedsel en Waren Autoriteit, NVWA) to the municipalities. This is accompanied by an intensive education and information campaign and law enforcement.

Anyone selling alcohol is obliged by law to request identification to verify the age of the purchaser. A vendor may not sell alcohol to anyone who is clearly planning to pass it on immediately to someone who is underage. Supermarkets and other retailers caught selling alcohol to under aged people three times within a year will be forbidden to sell alcohol for a period of time ('three strikes out'). Supermarket's adherence to the age limit to sell alcohol (and tobacco) increased with 14% compared to 2013 to 62% in 2014. Local authorities may link age restrictions to opening hours, impose restrictions on happy hours and special alcohol offers, and regulate sales of alcohol in sport club canteens and other such venues by local ordinance. A provision of the Criminal Code also bans the serving of alcohol to anyone who is manifestly intoxicated. The Road Traffic Act sets a maximum blood alcohol content of 0.5 mg/ml for drivers. For new drivers, who have less driving experience, the limit has been set lower at 0.2 mg/ml. The Media Act 2008 bans alcohol advertising on television and radio between 06.00 and 21.00 hours.

Public drunkenness and disorderly conduct were made offences under the Criminal Code (articles 453 and 426). Alcohol- and drug tests are planned to be made compulsory in case of violent offences, and a bill to increase sentences for violent offences under the influence of alcohol or drugs awaits parliamentary approval.

Excise duty increases are another instrument to discourage alcohol use. In January 2013 the excise duty increased with 10% for beer (0.01€ per bottle of 0.33 liter), 15% for wine (0.08€ per bottle), and 6% for other alcohol containing beverages (0.32€ per bottle liquor). Instead of the previously reported intended additional increase of 14% for beer and wine and 5% for spirits, a 5.75% increase in the excise duty for all types of alcohol-containing drinks was issued on the 1<sup>st</sup> of January 2014.

#### Tobacco

Dutch tobacco policy aims to decrease the number of smokers, support people who want to stop smoking, protect non-smokers from passive smoking, and prevent youth to start smoking and change their attitude towards smoking (NPP).

A new development concerns the increase in the legal limit to sell tobacco from 16 to 18 years on 1 January 2014. In addition, excise duty increased with 0.35€ for a packet of 19 cigarettes and 0.60€ for a 40g packet of rolling tobacco in June 2012. The additional 0.09€

increase for both cigarettes and rolling tobacco has been postponed from 1 March 2014 to 1 January 2015. Smoking advertisements have been prohibited since 2002 (Stb 2002-201).

The Tobacco Act of 2004 gives employees the right to work in a smoke-free environment, hence smoking is banned in government buildings, public buildings, hospitals, public transport, schools, cultural- and sport facilities, and most pubs, clubs and restaurants. Although small bars run by their owner without staff and smaller than 70 m² were excepted from July 2011 onwards, the government decided on 10 October 2014 to end that exception after a sentence by the Supreme Court³. Not only protection for passive smoking for employees, but also for customers is the basis for this revised legislation.

Adherence to the smoking ban is very high in most catering industry facilities (average 94%) with the exception of the subcategory of cafés and clubs (Intraval/nVWA, 2013). Adherence to the smoking ban in cafés and clubs increased from 58% in spring 2011 to 85% in spring 2014 (Intraval/nVWA, 2014). The Netherlands Food and Consumer Product Safety Authority (Nederlandse Voedsel en Warenautoriteit, NVWA) can impose penalties for Tobacco Act violations. The maximum fine for repeated violation of the smoking ban is planned to be increased from 4,500€ to 19,500€ (T.K. 33738-2).

#### Cannabis

Although the health perspective remains an important aspect of Dutch drug policy, the national policy measures in the 2011 drugs policy letter (T.K. 24077-259) announced a shift towards stricter legal measures against cannabis-related criminality and a stricter policy against nuisance associated with coffee shops. Not all announced measures were continued in the Coalition Agreement of October 29th 2012 for the Rutte II administration (see chapter 1). The government sees high-potency cannabis as carrying a health risk because it is a contributory factor in increasing damage to health, especially when used at a young age (see chapter 1). This is one of the arguments underlying the plans to place cannabis with a THC-percentage of 15% or more on Schedule I (hard drugs) of the Opium Act (T.K. 24077-293), making high-potency cannabis a hard drug. Thus, coffee shops would no longer be allowed to offer cannabis with a THC level of 15% and above, and higher penalties will be imposed for trafficking, importing and exporting high-potency cannabis. In 2014, the standing committee of Health of the House of Representatives had two rounds of written consultations with the Secretary of State and the Minister of Security and Justice, and organized roundtable conversations with cannabis experts (T.K. 33593-2, 3, 4; see §1.2). In 2014, THC levels of 15% or more were found in 50% of Dutch-grown weed samples and 56% of samples of imported hash, but in none of the imported weed samples (Rigter & Niessink, 2014).

## 3.3 Universal prevention

#### School

To ensure that young people are well-informed and can resist peer pressure to use substances, school-based drug education remains a central part of the Dutch approach to universal drug prevention. Throughout most of the Netherlands, drug prevention is part of the curriculum and the majority of schools have a drug education policy and guidelines for dealing with drug incidents. The website loketgezondleven.nl informs schools on drug education kits, online programs and interventions aimed at young people.

The Healthy School and Drugs (HSD) is the oldest school-based drug prevention program, with specific programs for primary schools, secondary schools, and intermediate vocational education. These programs consist of four parts: knowledge transfer, parental involvement, identification of and support for problem use, and preparation and communication of school drug policy. Local Public Health Services and addiction care support schools with the program implementation. In 2012, approximately a third of primary schools and 75 percent of secondary schools used (parts of) this program.

A comprehensive study among 3784 students at 23 secondary schools showed that the HSD program, as it is currently implemented, is ineffective (Malmberg et al., 2014). There were no effects on the onset of alcohol, tobacco and cannabis use. There was even a (non-significant) trend with more tobacco use with the HSD program. Based on previous knowledge, the authors suggest a more intense (i.e. more sessions) and skill-focused intervention method, more attention for the rule-setting behavior in the family context and expansion of skill-training elements. In addition, they suggest that selective prevention programs targeting 'at risk' populations may produce more effect than the HSD universal program. Bringing these results into practice, the HSD are implementing several program changes. Primary school prevention has been discontinued and interventions on parental alcohol and tobacco rule setting are expanded. Other changes are underway, including a more intensive intervention on social norms in the first year of secondary education; development of a new intervention to improve self-regulation and impulse control to reduce drug use for the final years of secondary education; more attention for professional training of teachers; a refocus from universal to selective and indicated prevention and development of interventions targeted at high risk groups.

Also in line with the suggestions by Malmberg et al. (2014), the Ministry of Health, Welfare, and Sport decided to implement an additional adolescent (15/16 years) school screening, for which 15 million euro has been reserved. With the aim to prevent escalation of problems, to assist youth in the physical and psychosocial transitions of adolescence, and to identify youth at risk for targeted prevention, the preventive care provided by specialized doctors and nurses is extended (BZ/2012/283M). Public Health Services are developing this additional screening, in which adolescents are given support and answers to questions regarding sexuality, substance use, nutrition, obesity and social wellbeing, and referred to appropriate care when needed. Currently, schools worrying about pupils with complex problems, including substance use problems, can call in assistance from a multidisciplinary Care and Advice Team (ZAT, zorg- en adviesteam).

## Family

The prevalence of alcohol, tobacco and cannabis use in Dutch children under 16 years has decreased between 2007 and 2013. A link with stricter parental rule setting has been suggested as in recent years, several prevention strategies were developed to prevent or postpone the onset of substance use by supporting parenting regarding substance use (De Looze, 2013). For example, in a 2011 lifestyle campaign "How Can I Help My Kids Say No to Tobacco, Alcohol and Cannabis?" mass media messages at key moments (e.g. holidays) were combined with a website containing practical guidance for parents (hoepakjijdataan.nl). This website is still available, yet (with the exception of the Nix18 campaign) mass media campaigns have been mostly abandoned by the government (see §3.4 and §3.5).

To support the organization of local interventions about substance use for parents, a guideline is made available for professionals of Public Health Services and Addiction clinics with information on interventions for parents and methods to recruit them.

## Community

For more than 16 years, the Drugs Information Line (Drugs Infolijn) has aimed to provide neutral, objective information on drugs to the general public and professionals. This service operated by the Trimbos Institute is not just a telephone line, but also uses online chat and e-mail. In addition, information is disseminated via Twitter, Facebook, online forums, and the evidence-based website www.drugsinfo.nl. This website contains information on drugs, drug treatment, the law, health, parental issues, risks of drug use, and a question & answers section. In 2013, the Drugs Information Line was contacted 3,986 times. Most information requests were about risks of drug use (17.1%), dealing with someone else's drug use (14.4%), effects of drugs (11.8%), traceability of drugs (8.7%) and withdrawal or desistence of drug use (8.0%). Most commonly, calls were with regard to cannabis (17.0%), ecstasy (14.0%), cocaine (9.6%), or drug use in general (18.7%). Questions on GHB (4.0%) and amphetamines (4.9%) were less common. In addition to information provision, people were referred to specialized addiction care 635 times and to their general practitioner 368 times. Information Line services are also dedicated to alcohol since 2007 and to tobacco as of January 2013. In 2013, the Tobacco Information Line was contacted 1,668 times, the Alcohol Information Line 1,254 times.

Various e-health interventions exist (see national report 2011), which are deemed useful low cost instruments for (selective) prevention.

## 3.4 Selective and indicated prevention in at risk groups and settings

With the abandoning of governmental media campaigns in 2011 (which is partly reconsidered with regard to alcohol and tobacco, see 3.5), the focus has shifted towards indicated and selective prevention. The distinction between selective and indicated prevention is, however, somewhat artificial in the Netherlands, as early identification of drug use and drug related problems are often part of a comprehensive (or stepwise) intervention program. Therefore both types of prevention are taken together in this paragraph.

## Youth

Scoring Results is a foundation that originated from a quality management program, funded by the Ministry of Health, Welfare, and Sport (VWS) since 1999. With the aim to improve quality in drug prevention and addiction care, various protocols and guidelines were developed and implemented. With the aim to improve professional training and education in addiction care, they also commissioned a digital educational program for students in higher professional education: 'Learnt in the cradle hooked till the tomb' (Jong geleerd, Oud verslaafd). Through training of future youth care professionals, this program aims to improve identification and management of addiction problems in children in youth care.

Last year, Scoring Results commissioned the report 'Investing in addiction prevention', giving an overview of Dutch addiction prevention programs for youth (Oudejans and Spits 2013). This report was discussed in more detail in the previous National Report.

The main conclusion was that there are many products covering most prevention levels and settings, but there is a lack of documentation, uniformity and proven effectiveness. While there was considerable overlap (e.g. educational interventions in the school setting such as Healthy school and drugs, Tripspel, SportMPower, Cannabis show), there were gaps for several vulnerable groups (identified in Snoek et al. 2010). Another important gap, identified by the heads of prevention departments (who are the core committee of Addiction Prevention Netherlands: VPN) who provided input for the report 'Investing in addiction prevention', was the lack of a uniform system for regional monitoring. Whereas they were aware that monitoring tools are available, these are not always accessible, appropriate, or the capacity or expertise for implementation and interpretation of results is lacking. Hence, an important starting point is missing for the development of regional policy, advice and agenda setting, as well as the development and use of available products by prevention departments. Therefore, 'Scoring Results' (Resultaten Scoren) commissioned the development of a national guideline for local monitoring of substance use, identifying when to use which monitor and whether uniform monitoring instruments are available, expected by the end of 2014.

Moreover, the existing program aimed at youth care professionals in at risk settings, Open and Alert, has been updated by the Trimbos Institute. Since 1 January 2014 it is available as an online course in addition to the already available course material and (implementation) manuals. At risk settings include residential child care, youth work, youth custodial institutions, and facilities for people with (mild) intellectual disabilities.

## Nightlife

Given the high rate of ecstasy use among partygoers and other subpopulations of young people and young adults in the nightlife scene (see chapter 2), the increased number and severity of ecstasy-related health emergencies at first aid posts (see below and chapter 6) and the increased MDMA concentration in ecstasy tablets (see below and chapter 10), several preventive actions and research activities are underway.

To reduce tobacco, alcohol, and illicit substance use (as well as other risky behavior) and related problems of youth (16-24 years), the Ministry of Health, Welfare, and Sport financed a new project: safe and healthy nightlife and events (Veilige en Gezonde Horeca en Evenementen, VGHE) aiming to support municipalities in their nightlife policy and providing information on risks of drug use for both youth and their parents (T.K. Aanhangsel 1050). Ongoing research to assist prevention include the assessment of factors that contribute to (reckless) alcohol and drug use among contemporary youth (in nightlife); drug use prevalence among students (16-24 years); barriers and facilitators for mini-interventions after drug related health incidents in emergency rooms and research focused on ecstasy use.

VGHE is a follow-up of a combination of projects including a variety of interventions and preventive instruments developed since 1998, including a quick-scan to detect drug problems, first aid courses for personnel in recreational settings (EHBDu) and a course for prevention professionals to educate personnel in recreational settings (bar smart), factsheets, a website for nightlife public (drugsenuitgaan.nl), and a help desk. The focus is on implementation of these interventions to increase the safety in recreational settings by reducing drug and alcohol use. A course on how to recognize and deal with excited delirium syndrome is developed for the police, as it has been suggested that substance use related aggression in night life settings towards public service professionals such as policemen, door men, ambulance staff, may partly be prevented by dissemination of knowledge on the

effects of alcohol and drugs, identification of substance use and on handling intoxicated people (Ferwerda et al., 2012),

VGHE also continues activities formerly executed by the Centre Safe and Healthy Nightlife (Centrum Veilig en Gezond Uitgaan) under the name Local Trimbos (Trimbos Lokaal). As municipalities are required (since 2011) to develop local prevention policy, this project supports them as centre of expertise to implement evidence-based interventions and practice- or experience-based activities in this domain. To this effort, a website 'municipalities and substances'; www.gemeenteengenotmiddelen.nl) is available and a Platform Safe and Healthy Nightlife will coordinated to confer with other health promotion institutes from the National Consultation of Theme Institutes (Landelijk Overleg Themainstituten, LOT-i) on risky behavior in general. These selective prevention initiatives exemplify the focus on collaboration between stakeholders from various fields, local policy and stricter legislation regarding substance use and violence (see §3.2).

Since the early nineties, the Drugs Information and Monitoring System (DIMS) monitors the chemical content of drugs, brought in by users at regional addiction prevention facilities affiliated with the DIMS (see also chapter 10). The collected data are used for drug policy, and users are informed about the composition of the drugs and warned about risks (education and prevention). Additional health risks of substance use, for example when extra harmful substances are detected, are communicated locally or nationally. In 2013, there were seven local and four national warnings: the first national warning regarded high doses of MDMA in ecstasy tablets and reckless drug use behavior among ecstasy users, the other three warned for specific tablets contaminated with PMMA (para-Methoxy-Nmethylamphetamine). These national campaigns are ongoing in 2014, and so far there were three local/targeted warnings: regarding the online sale of 2C-E containing 25I-NBOMe; tablets containing high dosages of amphetamine; and heroine being sold as cocaine to tourists in Amsterdam. As of 2012, DIMS has also been assigned by the Minister of Health, Welfare and Sports the task to monitor and report on new psychoactive substances, user characteristics, and potential health risks: Reporting Desk New Drugs, 'Meldpunt Nieuwe Drugs, MND'. Data are derived from the DIMS laboratory, custom's, Netherlands Forensic Institute. On a website (www.meldpuntnd.nl), users anonymously report new drugs and describe their experiences using these drugs.

The Monitor Drug-related Emergencies (Monitor Drugsincidenten, MDI) was set up in 2009, to provide an indicative overview of acute adverse effects of substance use, in addition to the pharmacological characteristics of substances monitored by DIMS (see also § 6.3). The MDI monitors the nature and extent of drug-related health emergencies in 29 ambulance transportation services, hospital emergency departments and forensic doctors in eight regions in the Netherlands, and national operating first-aid services at large-scale festivals. In addition to monitoring, risks identified by the MDI and DIMS are directly communicated within their networks to enable fast prevention responses. Since 2009, the proportion of drug-related emergencies involving ecstasy increased. Moreover, the proportion of moderate and severe drug-related emergencies increased (Croes et al., 2014; see chapter 6).

Peer education in nightlife (mostly large scale events) is facilitated by volunteers of Unity in co-operation with the addiction care facilities. Young volunteers are trained as peer educators to provide information in nightlife settings with the aim to reduce risks of recreational drug use. Since 2012, the Amsterdam 'Pink Unity' cooperates with the local addiction treatment center Jellinek and Public Health Services to specifically target the gay

scene. In addition to onsite peer education, Unity Master classes are given at universities and festivals, the underground party scene is reached by small mobile education teams, and information is provided online through social media and animation videos.

#### Research

Dutch addiction research depends for an important part on funding of the Netherlands Organisation of Health Research and Development (ZonMw) through financing from the Ministry of Health, Welfare, and Sport (VWS). In the past decades, ZonMw funded two consecutive five-year research programs specifically on addiction. The second program has not been continued after 2010, yet several studies from the second program are still to be completed. Nonetheless, there have been four general (not specifically substance related) ZonMw prevention programs. The fifth Prevention program was announced 1 July 2014 and will run until 2018. This fifth program aims to provide knowledge on the domains and objectives of the National Prevention Program (NPP, see first paragraph of this chapter). The specific research domains include: school, neighborhood and work; prevention in health care, and early detection. There is a preference to connect and analyze data from existing studies rather than conducting new studies. Moreover, there is a focus on implementation and monitoring of the progress of activities formulated in the NPP.

Specifically for (illicit) drugs, ZonMw coordinates the European Research Area Network on Illicit Drugs (ERANID), which is a network of eleven funding organizations from six EU-member states working together on an ERA-NET about Illicit Drugs. It is expected that the first call for projects is launched by the end of 2015.

## 3.5 National and local media campaigns

Due to budget cuts and a fundamental revision of lifestyle policy and interventions, the funding of the Ministry of Health, Welfare and Sport (VWS) for campaigns on smoking, drinking, and cannabis use and other mass media health campaigns have been withdrawn since the end of 2011 (T.K. 32793-2). Nonetheless, the policy changes regarding the fine for public alcohol possession by under aged people and the minimum age raise to buy tobacco any type of alcohol to 18 years will be accompanied by a government information campaign using flyers in supermarkets and free local papers. Moreover, a long term (mass media) campaign 'Nix18' propagating that alcohol use is 'not done' for people under 18 started in November 2013. This 'denormalising' campaign is funded and implemented by a cooperation including health charities, (alcohol) retailers' associations, national health promoting institutes, and the NVWA. This campaign will be co-ordinated by national government.

The campaign is targeted at the general population, but also specifically targets the social environment of youth under eighteen (in 2013 primarily on parents of 16 and 17 year olds) and highlights the importance of parental rule setting not to smoke and drink under eighteen. In 2013, the total media budget for television, radio, online, posters and cinema was 364,200 euro. After the campaign, parents more often spontaneously mentioned eighteen as the age limit (from 86% to 94%) and that selling cigarettes to people under eighteen is forbidden (from 86% to 91%). As the objectives regarding attitudes focus on the longer term, currently hardly any attitude effects were observed. Two-thirds of parents think

it is normal that young people do not smoke and drink under the age of eighteen: 70% think it is unacceptable for under eighteens to smoke and approximately 20% to drink. Although the behavioral objectives of the campaign also focus on the long term, already the general public, under eighteens and parents do speak more often on the subject. Other behavioral effects were stable: a fifth of parents and youngsters had made the appointment not to drink and 45% do not smoke under eighteen. Of 13-17 year olds, 55% indicated to never drink and 89 % said to never smoke. Similarly, 43% of parents think their children do not drink at all and 84% that their children had never smoked.

## 4 High risk drug use

#### 4.1 Introduction

There are no new national estimates about the number of high risk drug users. In the previous National Report, estimates were given for the number of problem opiate users and the (partly overlapping) number of dependent crack cocaine users. We will briefly summarize these findings and add new information on characteristics and patterns of use of three populations: i) dependent crack users; ii) the broader population of (injecting) problem hard drug users, and iii) frequent (partly dependent) cannabis users.

#### 4.2 Prevalence estimates

## Prevalence estimate of high risk opiates users

The most recent estimate of the number of high risk opiates users at national level pertains to the year 2012. It is estimated that in this year there were about 14,000 more or less high risk opiates users in the Netherlands, a decrease of about 21% compared to 2008-2009 (Cruts et al. 2013).8 The estimate of about 14,000 in 2012 comes down to about 1.3 high risk opiates users per 1,000 inhabitants aged 15 to 64 years. At a local level, in the provincial town of Enschede, it has been found that the number of high risk opiates users, since 2008, has stabilized (Kruize and Bieleman 2014).9 High risk opiates users were defined as those users who (almost) daily used heroin and/or methadone. In 2012 the number of high risk opiates users was estimated at 286, which stabilized at an estimated 275 high risk opiates users in 2013. This comes down to an estimated 1.7 high risk opiates users per 1,000 inhabitants in the whole population of Enschede in 2013, and 2.5 per 1,000 inhabitants in the population aged 15 up to including 64 years.

## Prevalence estimate of high risk crack users

In the previous National Report, it has been described that in the three largest cities of the Netherlands (Amsterdam, Rotterdam, and The Hague) there are an estimated 6,659 crack dependent drug users, 0.51% of the population aged 15-64 years (Oteo Pérez et al. 2013). Generalizing this estimate for the three largest cities to the whole country, a preliminary estimate indicates that there are between 17,437 and 23,904 dependent crack users in the Netherlands (Wisselink 2013). Many problem crack users also use opiates and are therewith already included in the estimated number of problem opiates users. Between 49% and 72% of the respondents in the three-city study who were recruited by respondent driven sampling had used heroin in the past month.

### Other substances

While health and treatment indicators point at an increase in the number of problem (dependent) GHB users, the size of this population is not known. In addition, no new

<sup>&</sup>lt;sup>8</sup>http://www.trimbos.nl/webwinkel/productoverzicht-webwinkel/alcohol-en-drugs/af/af1262-aantal-en-kenmerken-van-problematische-opiatengebruikers-in-nederland.

<sup>&</sup>lt;sup>9</sup>http://www.intraval.nl/nl/a/a81.html.

prevalence estimates have become available yet about the number of high risk users of cannabis and amphetamines.

## 4.3 Data on high risk drug users from non-treatment sources

In the above mentioned population of crack cocaine users, factors associated with current criminal involvement and specialization in selling drugs, property crime and violence were assessed (Oteo Pérez et al. 2015). In the past month, 431 participants (41.5%) had engaged in crime, mostly selling drugs (68.9%), followed by property crimes (34.4%) and a few cases of violent crime (9.7%). Younger age, homelessness, heavier patterns of use and a more prolific criminal justice history were associated with current criminality. Those receiving welfare benefits tended to be more likely to specialize only in selling drugs as opposed to (also) property crimes. Therefore, drug use reduction among criminally involved crack users and addressing their housing conditions could have a significant impact on reducing drug-related crime. Welfare benefits might act as protective factor against committing property crimes but not against the selling of drugs.

The housing condition also appeared to be a relevant factor in (risks associated with) injecting drug use. Whereas previous comparisons have shown injecting drug users to be at increased risk for harmful effects compared to non-injecting drug users, in the Netherlands homelessness among problematic hard-drug users decreased over the past year, and the focus of low-threshold addiction care shifted towards physical health. Therefore, another study recruited 202 problematic hard drug users from 22 low-threshold care facilities, comparing never-injecting (NIDUs n=64), former-injecting (FIDUs n=76) and current-injecting drug users (IDUs n=62) (Havinga et al. 2014). IDUs represented a separate group of problematic hard drug users, with least favorable characteristics (unstable housing/homelessness, illegal activities, polydrug use) and NIDUs appeared to have the most favorable characteristics (stable housing, help with debts, less polydrug use). The FIDU group lies somewhere in between. However, the three groups did not differ significantly in terms of health. The majority of IDUs had injected drugs for over 10 years and had injected heroin, cocaine, amphetamine and/or methadone in the past 6 months. Risk behavior indicators included sharing syringes, which was uncommon, and public injecting, reported by a quarter of participants. Although this suggests that the number of 'new' IDUs is low, public injecting among IDUs is not uncommon and is associated with unstable housing. This (also) emphasizes the potential of housing projects as a component of harm reduction measures. Therefore, prevention of (risks associated with) injecting drug use and supported housing programs for problematic hard drug users deserve the continuous attention of policymakers and professionals in low-threshold addiction care.

## 4.4 Intensive, frequent, long-term and other problematic forms of use

Dependent versus non-dependent frequent cannabis use

Data on cannabis use patterns and characteristics of different populations of cannabis users were collected in the framework of the CanDep study, a 3-year prospective cohort of 600 young adult frequent cannabis users recruited from coffee shops. Frequent users (≥3 days

per week for >12 months) with and without dependence were compared with patients in treatment for cannabis problems (Van der Pol et al. 2011).

Overall, CanDep participants recruited in the community lived rather conventional lives, apart from their frequent cannabis use, for example regarding work/school and leisure (Liebregts et al. 2013b). While approximately 40% of both dependent and non-dependent frequent users had also used in daytime (Van der Pol et al., 2013a), users did not use cannabis just anytime and anywhere. Cannabis use was mostly restricted to leisure time, at the end of the day when daily tasks are finished, to enhance several leisure activities. Most participants carefully select settings for use, often at home and preferably not in the company of non-users. Moreover, participants often assimilated their cannabis use to others, in particular to those with whom they spent most time (Liebregts et al. 2013a). While both groups often gave precedence to responsibilities (e.g. work and study), dependent users more often actively adapted their leisure activities to their cannabis use, whereas non-dependent users more often adapted their cannabis use to their leisure time (Liebregts et al. 2014).

Rather unexpectedly, cannabis use of dependent users barely differed from non-dependent frequent users in the community, despite notable individual differences (Van der Pol et al. 2013a). In contrast, patients in treatment used twice as much cannabis on average than dependent cannabis users in the community (see § 5.3.1) (Van der Pol et al. 2013a;d). The average number of joints used monthly was 78.7 for never-dependent frequent users (n=269); 82.8 joints for dependent frequent users (not in treatment in the past year, n=241); and 176.9 joints for patients in treatment (n=70).

## The course of frequent cannabis use and dependence

During the three-year follow-up, 37% of the (lifetime) non-dependent frequent cannabis users had their first onset of cannabis dependence. Rather than the level of cannabis use and other previously reported vulnerability factors, the onset was predicted by variables related to the current situation of the users: living alone, coping motives for cannabis use, number and type of recent negative life events (major financial problems), and number and type of baseline cannabis use disorder symptoms (impaired control over use) (Van der Pol et al. 2013c).

The course of dependence appeared to be dynamic but there was a general tendency towards spontaneous (temporary) remission (Van der Pol, 2014). Only 28% of the dependent frequent cannabis users at baseline were also dependent at both follow-ups. Such a persistent course of dependence was associated with more functional impairment and (higher levels of) cannabis consumption. Nevertheless, most persons with remitted dependence continued their (heavy) cannabis use and a third still had cannabis related problems. Yet, even among those with persistent dependence, treatment rates were low (15%). Although persistency was predicted by coping motives to use cannabis, lifetime anxiety disorder and any psychosis symptoms, only the number and type of life-time cannabis use disorder symptoms (role impairment, use despite problems) were independent predictors.

## Barriers to seek treatment for cannabis dependence

For dependent cannabis users, barriers to seek treatment were the desire for self-reliance, preference for informal help, and absence of a perceived need for treatment (Van der Pol et al, 2013b). Those who thought they needed treatment, but did not seek it, mainly expressed a desire for self-reliance, felt that treatment is not effective and tried to avoid stigma. People in treatment were roughly twice as likely to have a mental disorder and used twice as much cannabis compared to non-treatment seeking dependent users, and reported that mental health problems and functional impairment were important reasons to seek treatment.

## Assessment and role of cannabis potency (THC)

In a naturalistic experiment with a subpopulation of the cohort (n=106), users' ability to estimate their cannabis dose per joint and potency was validated against objective measures (Van der Pol et al., 2013e). Self-reported dose was based on a prompt card and the average number of joints made from one gram of cannabis. Potency was self-reported as level of intoxication, subjective estimate of cannabis potency and price per gram of cannabis. The observed tenfold difference between the lowest and highest objectively measured cannabis dose, and the wide range of the THC concentration (1.1–24.7%) in samples of the respondents' most commonly used cannabis, highlight the importance of these factors when assessing THC exposure. Unfortunately, self-report measures were only weakly associated with objective measures. However, the self-reported number of joints per gram, cannabis price and subjective potency had at least some validity.

It was also investigated whether people "titrate" their THC exposure (i.e. whether people smoking stronger cannabis use less cannabis in their joint or inhale less smoke) and whether smoking behavior characteristics predict dependence (n=98) (Van der Pol et al., 2014a). Users of more potent cannabis in fact used larger doses, yet inhaled less smoke when smoking strong joints. Hence, although they partly titrated their THC intake, they were nonetheless exposed to more THC, compensating for roughly half of the THC strength. However, inhalation behavior (number of puffs and decrease in the puff volume and puff duration over time) appeared to be a stronger predictor for cannabis dependence severity than monthly THC exposure.

# 5 Drug-related treatment: treatment demand and treatment availability

## 5.1 Introduction

#### Addiction care in the Netherlands

In the Netherlands, regular addiction care is provided by thirteen institutes, of which seven institutes have merged with an institute for mental health care and one institute has merged with an institute for social relief. The remaining five institutes did not merge, but remained a categorical institute for addiction care and treatment. All the thirteen regular institutes deliver anonymous data about treatment demand to the National Alcohol and Drugs Information System, the LADIS (Wisselink et al. 2014). The LADIS therewith does not yet contain data about addiction care offered by the non-merged mental health care and by private addiction clinics. The share of the private addiction clinics and the non-merged mental health care in the total addiction care is not known. It is estimated that the LADIS does not yet include about 5% of the total addiction care. Neither are other forms of care that are given to addicts outside the addiction care registered in the LADIS. For example, supported living offered by the Salvation Army and the addiction care given by general practitioners is not yet registered in the LADIS. Moreover, although the LADIS still contains the data about the probation care for addicts, the quality of these data has decreased too much. Therefore, since 2008, the LADIS no longer reports the data from the probation care. The Foundation for the Rehabilitation and Probation of Drug-Addicted Offenders (SVG) reports the results of its probation activities separately, based on data from its own monitoring systems (SVG 2013).

Together with the institutes for mental health care, all the regular institutes for addiction care have organized themselves in the Dutch Association of Mental Health and Addiction Care (GGZ Nederland), which is a member of Mental Health Europe. This institute supports the quality management of the addiction care by means of the program Scoring Results (Resultaten Scoren) that was launched in 1999.

## 5.2 General description, availability and quality assurance

## 5.2.1 Strategy/policy

## Political agreement

On the 18<sup>th</sup> of June 2012, the Ministry of Health, Welfare, and Sport (VWS) and the providers of mental health care and addiction care signed an agreement aimed to secure the future of mental health care and addiction care. To keep the mental health care and addiction care affordable in the near future, it was agreed to reduce the number of inpatient units by a third in 2020 compared to 2008. A third of the inpatient care will then have to be replaced by outpatient care. This will require more self-management from the clients.

The Dutch Association of Mental Health and Addiction Care (GGZ Nederland 2013) has put the agreement between the care providers and the Ministry into practice by means

<sup>&</sup>lt;sup>10</sup>http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2012/06/18/bestuurlijk-akkoord-toekomst-ggz-2013-2014.html.

of a vision document.<sup>11</sup> The starting point for the vision document is that, due to the replacement of inpatient care by outpatient care, addiction clients themselves are in charge of their own treatment. The treatment focus will shift towards empowerment, reintegration and self-regulation of the addiction clients, with the assistance of experts by experience.

To keep the health care in the Netherlands affordable, the Council for Care Insurance (CVZ) will further investigate which forms of alleged health care are actually inappropriate. On the 30th of September 2013, the minister of Health, Welfare, and Sport announced that the CVZ will pay special attention to inappropriate 'treatments' that occur in the addiction care. Inappropriate treatments are treatments for which reimbursement is requested at a health insurance company, although such treatments are not necessary for the basic evidence-based addiction treatment. Especially luxury facilities are not required for basic addiction care. The activities of the CVZ have been continued by the National Health Care Institute (Zorginstituut Nederland), that published its draft report on the 22<sup>nd</sup> of August 2014 (Polman and Visser 2014). Based on the principle to only reimburse evidence-based treatments, the following recommendations are given:

- Only reimburse treatments based on valid scientific diagnoses of the severity of a client's addiction;
- Only reimburse clinical inpatient detoxification in case it is medically required and outpatient detoxification is not feasible;
- Only reimburse clinical inpatient treatment in case it is medically required and outpatient detoxification is not feasible:
- Only reimburse day care in case a client's interaction with his or her social network continues;
- Only reimburse treatments that include aftercare.

## Reorganization of the addiction care

To reduce the number of inpatient units, the addiction care, as part of the mental health care, has been reorganized in the Netherlands since the 1<sup>st</sup> of January 2014 (Ruiter et al. 2014). The addiction care is now organized in the form of stepped care at three echelons:

- At a first echelon, a patient receives frontline support at a General Practice from a doctor or a General Practice Mental Health Worker (POH-GGZ).
- At a second echelon, a patient receives Primary Mental Health Care (Basis GGZ).
- At a third echelon, a patient receives Secondary Mental Health Care (Gespecialiseerde GGZ).

A more severe and complex addiction problem requires treatment at a higher echelon of care (see Figure 5.2.1).

<sup>&</sup>lt;sup>11</sup>http://www.ggznederland.nl/ggz1315-01-visiedocument-verslavingszorg\_web.pdf.

<sup>&</sup>lt;sup>12</sup>http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2013/09/30/kamerbrief-over-buitenhof-oproep-aanpak-doorlichting-pakket-en-reactie-op-twee-cvz-rapporten-geneeskundige-geestelijkegezondheidszorg-deel-2-en-kosteneffectiviteit.html?ns\_campaign=kamerstukken-ministerie-van-volksgezondheid%2C-welzijn-en-sport&ns\_channel=att.

<sup>&</sup>lt;sup>13</sup>http://www.zorginstituutnederland.nl/binaries/content/documents/zinl-www/documenten/rubrieken/pakket/adviescommissie/1408-acp---rapport-verslavingszorg/1408-acp---rapport-verslavingszorg/page=1&zoom=auto,-130,761.

<sup>&</sup>lt;sup>14</sup>http://www.government.nl/issues/mental-health-services/primary-and-secondary-mental-health-care.

Figure 5.2.1 Flow chart for the flow of the addiction clients through the three echelons.

## Risk?

Indications of severe self neglect, neglect of significant others, decompensation, suicide risk, violence, child abuse or automutilation?

No

## Complex?

Complicated comorbidity or Axis 2, 3 or 4 problems requiring multidisciplinary treatment in specialised setting?

No

# Suspicion of DSM-IV disorder?

No Is DSM-IV disorder suspected?

Yes

# Symptom duration and severity

Meets guidelines to establish disorder?

Yes

Secondary Mental Health Care (Gespecialiseerde GGZ)

General practitioner

General Practice Mental Health Worker (POH-GGZ)

## Primary Mental Health Care (Basis GGZ)

Light / average / severe / chronic symptoms

Short / average / instensive / chronic Primary Mental Health Care

General Practitioners receive extra funding for working together with the addiction care. For referring a patient to the Primary Mental Health Care or the Secondary Mental Health Care, it is required that the patient suffers from a mental disorder in terms of the Diagnostic and Statistical Manual of Mental Disorders (DSM). The Primary Mental Health Care targets mild to moderate mental health problems, including addiction problems, but there has to be a mental disorder. The Secondary Mental Health Care targets complex and serious mental disorders, including addiction, and can be offered in an outpatient setting by means of (compulsory) community care. This way, the number of inpatient units is to be reduced.

Unfortunately, it is expected that, as a result of the reorganization into the three echelons, an even greater part of the addiction care will not be registered in the National Alcohol and Drugs Information System (LADIS). The implementation of the Primary Mental Health Care and the Secondary Mental Health Care will be monitored by the KPMG Company. A first evaluation suggests that the admissions to the Primary Mental Health Care are less than expected, partly due to having to pay an own contribution (KPMG 2014).

For the developments with regard to the e-health interventions in the addiction care, see paragraph 1.2.1 of this report.

## 5.2.2 Treatment systems

## Quality management by the program Scoring Results

The previous 2013 Netherlands National Report mentioned as new products from Scoring Results the "Practice-based recommendations for GHB detoxification", <sup>15</sup> the advisory report "Elderly and addiction", <sup>16</sup> and the quick scan "Scoring results around recovery". <sup>17</sup> Three new products have now resulted from Scoring Results: an update of the "Masterprotocol Scoring Results", "Examples of working together on addiction prevention and care in the youth care" and the "State of affairs in science and practice about behavioural addictions".

The update of the "Masterprotocol Scoring Results" (Scoring Results 2014)<sup>18</sup> gives guidelines for the development of protocols, guidelines, and knowledge documents for the addiction care. All the products for Scoring Results are set up in a uniform way according to the Masterprotocol. It has now been updated by conforming it to the protocol style of the Dutch Institute for Healthcare Improvement (CBO) and the Ministry of Security and Justice, including the contributions of clients and their family, accounting for cultural diversity, and by adopting a systematic maintenance plan.

The "Examples of working together on addiction prevention and care in the youth care" (Scoring Results 2013)<sup>19</sup> show some best practices for working together. These practices demonstrate how different institutes can work together successfully around young people having multiple problems like addiction, psychiatric problems, delinquency, and mild mental retardation.

The "State of affairs in science and practice about behavioural addictions" (Scoring Results 2014)<sup>20</sup> reviews the current scientific knowledge and practice at the institutes for addiction care about six behavioural addictions: gambling addiction, internet addiction, video games addiction, social media addiction, sex addiction, and eating addiction. It is advised that the addiction care will develop appropriate treatments for these behavioural addictions.

Apart from the quality management program Scoring Results, a new measurement instrument has been validated recently to screen current post-traumatic stress disorder in patients with substance use disorder (Kok et al. 2015).<sup>21</sup> This new instrument is given by the

<sup>&</sup>lt;sup>15</sup> http://www.resultatenscoren.nl/publicaties/detail/ghb-protocollen.html.

<sup>&</sup>lt;sup>16</sup> http://www.resultatenscoren.nl/publicaties/detail/ouderen-en-verslaving.html.

<sup>&</sup>lt;sup>17</sup> http://www.resultatenscoren.nl/publicaties/detail/resultaten-scoren-rond-herstel.html.

<sup>18</sup> http://www.resultatenscoren.nl/publicaties/downloaden/masterprotocol-herziene-conceptversie-2014.html.

<sup>19</sup> http://www.resultatenscoren.nl/publicaties/detail/samenwerken-bij-middelenproblematiek.html.

<sup>&</sup>lt;sup>20</sup> http://www.resultatenscoren.nl/publicaties/downloaden/gedragsverslavingen.html.

<sup>&</sup>lt;sup>21</sup> http://www.karger.com/Article/FullText/365283.

"Depression, Anxiety and Stress Scale (DASS)". This screening instrument "was assessed in an inpatient facility during intake with 58 patients and again 4 weeks after admission. Another 138 patients were assessed 4 weeks after admission only. The results were compared to the Clinician-Administered PTSD Scale (CAPS) that was also administered after 4 weeks of abstinence." From their validation study the authors conclude that the DASS is "a reliable and convenient measure to use as a screen for PTSD in SUD patients". Apart from being a valid screener for PTSD, the authors summarize the following additional advantages of the DASS: "with the DASS it is also possible to screen for depression and anxiety disorders, which makes it a time-efficient and therefore cost-effective approach", "the DASS is in the public domain, so there are no financial costs", and "the DASS is already being used in many treatment facilities in the Netherlands and could thus be a convenient measure".

## 5.3 Access to treatment

## 5.3.1 Regular addiction treatment

As mentioned above, the National Alcohol and Drugs Information System (LADIS) is the most comprehensive information system about clients in the regular addiction treatment in the Netherlands. Although the LADIS has a wide coverage of clients receiving treatment for their addiction problems, some private clinics, non-merged mental health care institutes, and addiction units in general psychiatric hospitals are not yet represented in the LADIS.

The data in this paragraph are based on the protocol for the Treatment Demand Indicator (TDI) as established by the EMCDDA (Standard Table TDI\_2014\_NL\_01). This means that only those clients who have had more than one face-to-face contact with an addiction counsellor are included.

Moreover, the TDI only includes clients who subscribed in the year of registration, not those who already registered the previous year and were still in treatment. However, it includes both clients subscribed for the first time in their life for a drug problem (first treatments), and clients that re-subscribed in the registration year. The TDI controls for double counting of persons. These criteria are more restrictive than the criteria applied by the holder of the LADIS, the Foundation for the Provision of Care Information (IVZ), to assess the annual LADIS Key Figures. Therefore, the figures presented below deviate from the figures reported elsewhere (Wisselink et al. 2014).<sup>22</sup>

With regard to the regular heroin-assisted treatment, the number of treatment places has been stabilized in 2014 at 740 treatment places that are operational at 18 units in 16 different municipalities (Ministry of Health, Welfare, and Sport, personal communication). In 2015, the number of treatment places for heroin-assisted treatment will be reduced to 700 places. Some of the clients in heroin-assisted treatment also receive methadone and are represented in the LADIS among the opiates clients.

#### Trends

In 2013 there were 11,129 new clients (excluding probation), compared to 10,801 new clients (excluding probation) in 2012 and 11,341 new clients (excluding probation) in 2011.

<sup>&</sup>lt;sup>22</sup> http://www.sivz.nl/nl/ladis/kerncijfers.

Including probation, the annual number of new clients from 2002 up to including 2010 varied between eight and eleven thousand, without showing a clear trend. Figure 5.3.1 shows the distribution of the new clients from 2004 up to including 2013 by primary drug of abuse.

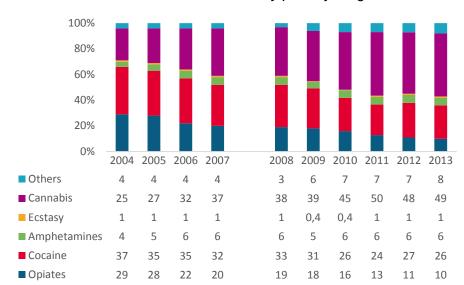


Figure 5.3.1: Proportion of clients subscribed in the registration between 2004 and 2013 at the institutes for addiction treatment by primary drug<sup>l</sup>

I. Selection of clients based on the EMCDDA TDI protocol. Probation clients are excluded since 2008. Source: LADIS, IVZ.

## Figure 5.3.1 shows the following:

- The percentage of opiates clients among the new drug clients decreased from 29% in 2004 to only 10% in 2013.
- Each year, the proportion of cocaine clients (including crack clients) exceeds the proportion of opiates clients. However, it should be noted that these percentages differ from the overall number of clients including the clients who were already registered in the year before the reporting year.
- The proportion of cannabis clients steadily increased from 25% in 2004 to 49% in 2013.
- The ecstasy and amphetamines clients, when taken separately, never accounted for more than 6% of the new drug clients.

## Age

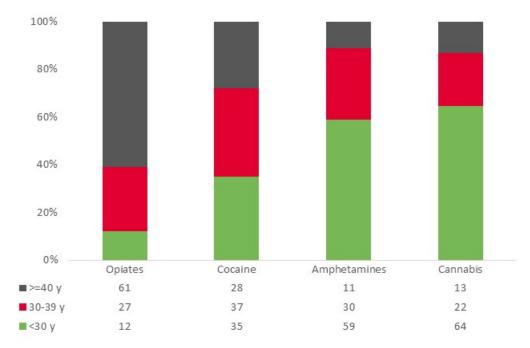
Figure 5.3.2 shows the age distribution in 2013 by primary drug of abuse. Clients seeking treatment for high-risk use of opiates most often fall in the older age groups. On the contrary, clients who have a primary problem with amphetamines or cannabis, most often fall in the youngest age groups.

#### Gender

The percentage of females among all the new drug clients varied over the years between 12% and 21%. Figure 5.3.3 shows the gender distribution by primary drug in 2013. The

proportion of females was the highest among the amphetamines clients (22%), and was the lowest among the cocaine clients (14%).

Figure 5.3.2: Clients subscribed in 2013 at addiction treatment centers by primary drug and age group<sup>l</sup>



I. Selection of clients based on the EMCDDA TDI protocol, excluding probation clients. Source: LADIS, IVZ.

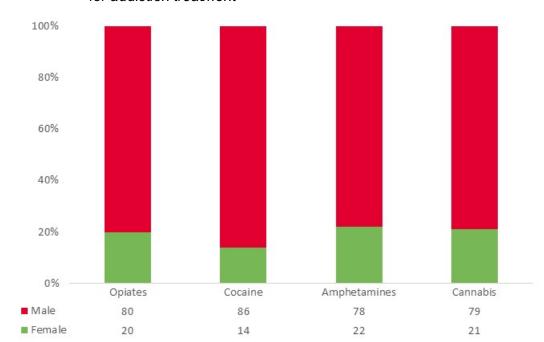


Figure 5.3.3: Gender distribution by primary drug of clients subscribed in 2013 at centers for addiction treatment

I. Selection of clients based on the EMCDDA TDI protocol, excluding probation clients. Source: LADIS, IVZ.

## Treatment seeking for GHB dependence

As a recent product from Scoring Results, paragraph 5.2.2 above mentioned the Practice-based recommendations for GHB detoxification. GHB is now registered separately in the TDI within the category of "Hypnotics and Sedatives". A total of 488 cases were registered in 2013, amounting to 4% of all TDI-cases (Standard Table TDI\_2014\_NL\_01). The total number of GHB clients in the addiction care in the Netherlands has increased over the past years. From 2007 up to including 2013, the total number of old and new primary GHB clients (excluding probation), as registered in the National Alcohol and Drugs Information System (LADIS), increased from 59 to 769 GHB clients (Van Laar et al. 2014).<sup>23</sup>

A further analysis of the GHB clients represented in the LADIS has shown that the "recidive rate in patients with GHB-dependence is high" (MoI et al. 2014).<sup>24</sup> That is, "GHB-clients much more often start with a second treatment episode compared with clients with another primary problem". For the GHB clients the "hazard ratio is almost more than two times as large". From this finding the authors conclude that "GHB is more addictive than other substances".

## Treatment seeking for cannabis dependence

With regard to cannabis dependence, the determinants of treatment seeking have been investigated by comparing 70 cannabis clients to 241 non-treatment seeking cannabis dependent community subjects (Van der Pol et al. 2013).<sup>25</sup>

<sup>&</sup>lt;sup>23</sup>http://www.trimbos.nl/~/media/files/gratis%20downloads/af1316%20nationale%20drug%20monitor%20jaarberic ht%202013-2014.ashx.

<sup>&</sup>lt;sup>24</sup>http://link.springer.com/article/10.1007/s12501-014-0030-6/fulltext.html.

<sup>&</sup>lt;sup>25</sup>http://onlinelibrary.wiley.com/doi/10.1111/add.12196/abstract.

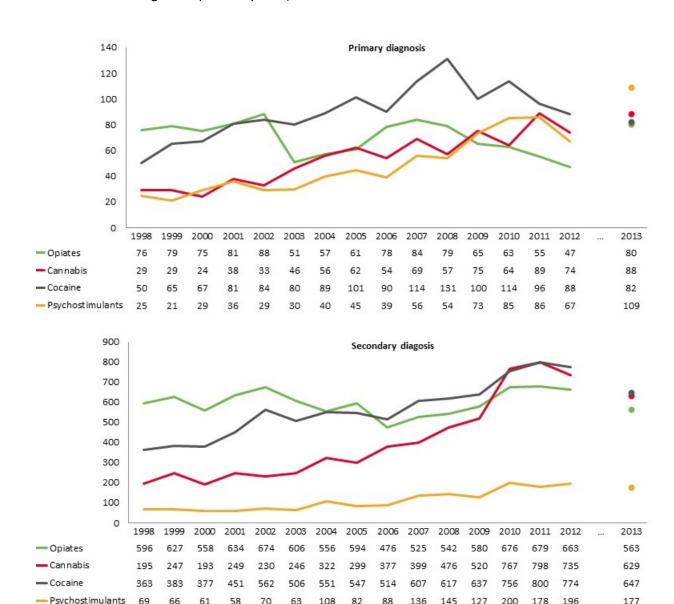
- It was found that clients in treatment for cannabis dependence use approximately twice as much cannabis, compared to cannabis dependent people in the community who do not seek treatment (see chapter 4).
- The cannabis dependent treatment seekers also experience considerably more functional impairment and comorbid mental disorders, which facilitates treatment seeking.
- Barriers to seek treatment for cannabis dependent community subjects are "desire for self-reliance", "preference for informal help", and "absence of the need for treatment". In case of a subjective treatment need the main barriers to seek treatment are "desire for self-reliance", "treatment ineffectiveness", and "avoiding stigma".

## 5.3.2 General hospital admissions

Admissions to general hospitals in the Netherlands are recorded via the National Hospital Care Basic Registration (LBZ) held by the Foundation Dutch Hospital Data (DHD). Up to including the registration year 2012, these admissions were coded to ICD-9. For the registration year 2013, the admissions were coded to ICD-10. Figure 5.3.4 shows the number of clinical admissions to a general hospital for a primary or a secondary diagnosis related to opiates, cannabis, cocaine, and psychostimulants. Up to 2012, the ICD-9 codes refer to abuse and dependence. For 2013, the ICD-10 codes refer to mental and behavioural disorders due to psychoactive substance use (F-codes).

- In 2013, the National Hospital Care Basic Registration (LBZ) recorded almost two million clinical hospital admissions (DHD 2013). In 2013, drugs were recorded only 1,068 times as a primary diagnosis and 2,516 times as a secondary diagnosis (ICD-10 codes F11, F12, F14, F15, F16, F19, T40, and T43.6).
- When including the T-codes for poisoning, opiates made up 14% of the primary and 24% of the secondary diagnoses. Cocaine made up 12% of the primary and 28% of the secondary diagnoses. Cannabis made up 10% of the primary and 26% of the secondary diagnoses. Psychostimulants made up 28% of the primary and 10% of the secondary diagnoses.

Figure 5.3.4: Number of admissions to general hospitals related to opiates, cannabis, cocaine, and psychostimulants, as primary diagnosis (top panel) or secondary diagnosis (bottom panel), from 2004 to 2013<sup>l</sup>



I. Between 2012 and 2013 a transition took place from ICD-9 coding to ICD-10 coding. Up to including 2012, the ICD-9 codes refer to abuse and dependence. For 2013, the ICD-10 codes refer to mental and behavioural disorders due to psychoactive substance use (F-codes). Source: National Hospital Care Basic Registration (LBZ), Dutch Hospital Data (DHD).

#### Trends

Due to the transition from ICD-9 coding to ICD-10 coding in 2013, the figures for 2013 cannot be compared directly to the previous years, which precludes a straightforward trend analysis.

Table 5.3.1 summarizes the precise numbers for 2013 for the main drugs of abuse and gives the number of drug patients after correction for double counting. The mean age was the highest for opiates patients (47 years), followed by cocaine patients (40 years). The

cannabis and psychostimulants patients were the youngest, their mean age being respectively 33 years and 30 years.

Table 5.3.1: Clinical admissions to general hospitals in 2013 related to cannabis, cocaine, opiates, and psychostimulants<sup>1</sup>

	Cannabis	Cocaine	Opiates	Psychostimulants
Primary diagnoses				
Excluding T-codes	88	82	80	109
Including T-codes	112	133	146	297
Secondary diagnoses				
Excluding T-codes	629	647	563	177
Including T-codes	654	696	603	254
Total number of persons <sup>II</sup>	647	689	579	504
Mean age	33 years	40 years	47 years	30 years
Percentage male	75%	75%	69%	60%

I. ICD-10 codes: cannabis: F12, T40.7; cocaine: F14, T40.5; opiates: F11, T40.1, T40.3; psychostimulants: F15, T43.6. Clinical admissions do not include one-day admissions. II. After correction for double counting: number of unique persons who were clinically admitted at least once (during their first admission) due to a drug-related disorder assigned as a primary or secondary diagnosis, including T-codes. Source: National Hospital Care Basic Registration (LBZ), Dutch Hospital Data (DHD).

## 5.3.3 Conclusion

The number of new drug clients in the addiction care (TDI definition) increased with 3% from 10,801 new drug clients in 2012 to 11,129 new drug clients in 2013. But from 2011 to 2012 there was a decrease of 5%. These small fluctuations in the addiction care parallel the stabilization of the number of drug patients in the hospitals during the past three years. The decrease in the number of drug clients in the addiction care in 2012 could have resulted from the own private contribution which the clients would have to pay initially in this year. However, no such own private contribution was announced for the hospital care. All in all, these findings might point at a stabilization of the number of problem drug users.

## 6 Health correlates and consequences

## 6.1 Introduction

This chapter describes the fatal and non-fatal consequences of drug use. The focus of this chapter is on problematic drug use. The Netherlands has a long standing tradition on harm reduction and a large package of harm reduction measures is available since the eighties, reaching the far majority of those problematic drug users in need of it. As a result, the incidence of drug-related infectious diseases (§ 6.2) as well as overdose death (§ 6.4) has been substantially reduced. The prevalence of all drug-related infections, however, is still (substantially) higher than in the general population.

## 6.2 Drug-related infectious diseases

The most important drug-related infectious diseases include HIV/ AIDS, and hepatitis B and C. They are transmissible through sexual contact (HIV, hepatitis B) and blood (hepatitis C, HIV and hepatitis B). Because of the shared routes of transmission, co-infections are (highly) prevalent. Infectious diseases associated with poor living conditions (such as hepatitis A and tuberculosis) may also have higher incidence and prevalence rates among drug users. The incidence, i.e., the number of new diagnoses, of HIV, hepatitis B and C among injecting drug users is low since many years. The data of the current reporting year point into the same direction. However, the number of chronically infected drug users (i.e., prevalence), and thereby the burden of these diseases, is higher, especially for hepatitis C.

In this paragraph we present prevalence and incidence data on HIV, hepatitis C and B among (injecting) drug users based on the results from the national HIV/ AIDS registry, the Amsterdam Cohort Studies among drug users, regular screening data from drug treatment centres, and notification data on hepatitis B and C. As described in previous reports, the (HIV) sentinel surveillance system among (ever) injecting drug users (IDUs) of the National Institute of Public Health and the Environment (RIVM) has been discontinued and no recent data from national IDU surveillance systems are available.

#### 6.2.1 HIV

a. The national HIV/ AIDS registration of the HIV Monitoring Foundation (SHM) was appointed by the Dutch Ministry of Health Welfare and Sport as the executive organisation for the monitoring of HIV in the Netherlands in 2002. This registration contains data on HIV-infected patients who are seen regularly by HIV/ AIDS treating physicians in one of the 26 (sub)centres for HIV care for adults (or 4 centres for the treatment of paediatric HIV and AIDS) throughout the country. It also includes data from a prior project on HIV positive patients treated between 1998 and 2001 (the AIDS Therapy Evaluation Netherlands, or ATHENA, cohort). The longitudinal data are used to monitor changes in the HIV epidemic, the natural history of HIV and the effects of treatment (www.hiv-monitoring.nl). Every year, another 1,100 patients enter into care (Van Sighem et al. 2013). However, it is likely that a quarter of the estimated 25,000 individuals living with HIV in the Netherlands (6,750) are

unaware of their infection and still contribute to fuelling the epidemic. Still, two third of new diagnoses are in MSM, while the contribution of injecting drug users to new HIV diagnoses is less than 1%.

- In 2013, 829 new HIV diagnoses were reported in the treatment centres. In 1 man and 2 women injecting drug use was the most likely route of transmission (table 6.2.1) (Van Aar et al. 2014).
- Up to December 2013, a cumulative total of 21,723 HIV-infected individuals were registered by the treatment centres and the HIV Monitoring Foundation (Van Aar et al. 2014). The percentage of patients infected with HIV through injecting drug use is 3.4 (749 patients). Up to 2000, 8% of all new HIV-diagnoses was associated with injecting drug use, but since 2000 this has declined sharply. The main route of HIV-transmission in the Netherlands is sexual: through MSM contact in 57% of cases and through heterosexual contact in 31%.
- From 1995-2012, 651 (ever) injecting drugs users started combination artiretroviral therapy (cART) (van Sighem et al, 2013). Injecting drug use was associated with a statistically significant longer time to initial viral suppression (defined as less than 100 copies/ml), even after adjustment for female gender, a lower plasma viral load at the start and being co-infected with hepatitis C virus (hazard ration 0.51; 95% CI 0.42-0.62; reference group is MSM) (van Sighem et al, 2013).
- Also the long term virological response was less favourable in injecting drug users. The
  hazard ratio of virological failure (defined as time to the first two consecutive plasma viral
  HIV RNA levels > 200 copies/ml after 24 weeks on antiretroviral therapy) for injecting
  drug users was 1.79 (95% CI 1.18-2.70; p=0.006; reference group is MSM; adjusted
  model) (van Sighem et al, 2013).
- Finally, incomplete immunological recovery, which is associated with an increased risk of mortality, AIDS and non-AIDS defining diseases, was 4 times higher in drug users compared with the reference group MSM (OR 4.31; 95% 1.64-11.37; p=0.003) (van Sighem et al, 2013).
- Toxicity of medication (e.g., lipodystrophy, central nervous system toxicity, renal insufficiency, diarrhoea), on the other hand, is less of an issue in drug users. The relative risk for toxicity driven changes in therapy during the first 3 years after the start of cART was 0.86 (95% CI 0.80-0.92; p<0.00001; reference group MSM) (van Sighem et al, 2013).</li>
- Drug users were at increased risk of developing diabetes mellitus, while on cART (odds ratio 1.80; 95% CI 1.23-2.63; reference group MSM). There was no increased risk found for cardiovascular disease (odds ratio 1.12; 95% confidence interval 0.76-1.65) and a decrease in the risk on non-AIDS defining malignancies (odds ratio 0.66; 95% confidence interval 0.44-0.98; reference group MSM) (SHM Monitoring report 2013, web appendix).

Table 6.2.1: Number and characteristics of recorded HIV infections by route of transmission <sup>1</sup>

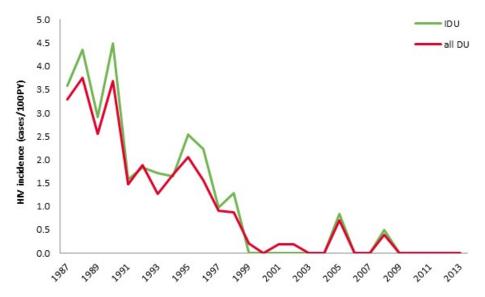
Transmission group	HIV cases diagnosed in 2013	Cumulative HIV diagnoses (up to 2013)	Gender: percentage males (of cumulative number in transmission group)
Total	829	20 528	80%
IDU	3 (0.4%)	749 (3.4%)	73%
MSM	580 (70.0%)	12,481 (57.5%)	100%
Heterosexual contact	188 (22.7%)	6,733 (31.0%)	44%
Percentage other	58 (7.0%)	1,760 (8.1%)	76%

I. Figures are adjusted constantly because of reporting delays. IDU: injecting drug use; MSM: men who have sex with men. The group "other" includes receivers of a blood product, needle stick injuries, mother-to-child transmission and unknown causes. Source: HIV Monitoring Foundation/ RIVM (Van Aar et al. 2014).

- b. The prospective Amsterdam Cohort Studies (ACS) are a collaboration between the Amsterdam Health Service, the Academic Medical Centre of Amsterdam, the Sanquin Blood Supply Foundation and the University Medical Centre Utrecht (www.amsterdamcohortstudies.org). The ACS has been carried out since 1984 among homosexual men and since 1985 among drug users. Since 2000, only young drug users (aged <30 years) are allowed to enter the cohort (YODAM). From July 2009 on, also recent injecting drug users (irrespective of their age) are invited to participate. Drug users are recruited at methadone posts, the STD-clinic for drug-using prostitutes and by word of mouth. The enrolment and follow-up (every four to six months) are facilitated by the well organised health care system for drug users in Amsterdam. Research in the ACS ranges from epidemiology and social science to virology, immunology and clinical medicine. The latest available data show that 1,661 (injecting) drug users were included in the ACS, as of December 2012 (Van Sighem et al. 2013).
- At study entry, 322 of the 1,661 drug users were HIV-positive (19%) and 99 seroconverted during follow-up (Van Sighem et al. 2013). For comparison, of the 2,511 MSM in the ACS 614 were HIV-positive at study entry (24%) and 232 seroconverted during follow-up.
- In 2012, 285 drug users were still followed. Their median age was 50.5 years, 16.2% were non-Dutch and 9,5% had attained a high level of education. Of the 285 drug users followed in 2012, 18 were HIV-positive at entry, 13 seroconverted during follow-up and 20 drug users died. Although the cohort is open and efforts were made to include new participants, only 3 were recruited in 2012. The unpopularity of injecting in Amsterdam may explain this partly (Van Sighem et al., 2013).
- HIV incidence rates among ever-injectors dropped from 8.6/100 person-years in 1986 to virtually 0 since 2000, with a slight increase to 0.85/100 person-years in 2005, when 2 HIV-cases were found (Figure 6.2.1). Apart from one positive case in 2008, no new HIV infections were diagnosed in drugs users (injecting and non-injecting) from 2006 to 2013 (Van Aar et al., 2014).

• A recent study, including 1298 participants of the Amsterdam Cohort Study, with a total follow-up of 12,921 person-years, concluded that the decline in HIV incidence since 1986 is accompanied by a reduction in injecting risk behavior and sexual risk behavior (van der Knaap et al, 2013). Unprotected sex is associated with steady partners and less common among HV-infected participants. Also the prevalence of sexually transmitted infections is low. The findings indicate that, these days, drug users do not play a significant role in the spread of HIV in Amsterdam.

Figure 6.2.1: Yearly HIV-incidence of injecting drug users (IDU) (≤30 years at entry) and all drug users (DU) included in the Amsterdam Cohort Studies, 1985-2013



Source: Amsterdam Cohort Studies/ RIVM (Van Aar et al., 2014).

- c. Regular screening of infectious diseases among drug users in treatment settings is recommended in several guidelines and this recommendation is regularly followed, but the test results are not available for monitoring purposes, as the data are stored in individual patient files.
- In Amsterdam, the Public Health Service (GGD) runs most of the low threshold methadone treatment locations. As part of the treatment, patients are regularly offered tests for drug related infectious diseases. However, in practice not all clients are tested. The results may be biased in two directions. First, professionals are more insistent on the screening in case of new clients and those with higher risk behaviour (usually prostitutes), which may result in a slight over-estimation. On the other hand, drug users who are already in HIV (or hepatitis C) treatment will not be tested again. The effect hereof is expected to result in a significant underestimation.
- In 2013, 31 of 38 ever IDUs in methadone treatment were tested for HIV antibodies; in none of them HIV antibodies were found (source: M. de Wit, GGD Amsterdam). See also Standard Table 09 (ST09P2).

#### 6.2.2 AIDS

Until 2001, AIDS cases meeting WHO criteria were registered in the national Information System on AIDS Statistics, maintained by the Health Care Inspectorate (IGZ). In 2002 this AIDS registration was replaced by the HIV/ AIDS registration of the SHM mentioned above. As the IGZ data appeared to be incomplete since 2000, the data below are based on the IGZ registration until 1999 and the SHM data from 2000 onwards. The year of AIDS diagnosis refers to the date of the first CDC-C diagnosis (classification C according to the Centres for Disease Control).

- Up to December 2013, the cumulative total of reported AIDS diagnoses was 9,150 and 5,593 HIV infected individuals had died (Van Aar et al., 2014). The annual number of new AIDS diagnoses peaked in the first half of the nineties (around 500 cases per year) and then gradually dropped, to 155 cases in 2013 (Van Aar et al., 2014). The observed decrease since 1996 is related to the availability of HAART, which slowed progression from HIV to AIDS.
- Of the 155 new AIDS diagnoses in 2013, 2 (1.3%) were among injecting drug users (table 6.2.2). In the same year, 124 AIDS patients died, among whom were 12 (9.7%) injecting drug users. Note that the data for 2013 are incomplete due to reporting delay (Van Aar et al. 2014).
- Up until December 2013, 728 registered AIDS patients (8.5% of the total AIDS diagnoses) belonged to the transmission risk group of injecting drug users. The number of diagnosed AIDS cases related to injecting drug use peaked in 1995 (74), but remained at or below 15 cases per year since 1999, with the exception of 2005 (24 cases). The hazard ratio for injecting drug users for time to AIDS from the start of cART.is significantly higher than for MSM (hazard ratio 1.59; 95% CI 1.20-2.10; reference group MSM) (SHM Monitoring report 2013, web appendix).
- Note that the percentage of IDUs among the total population of AIDS patients (8.5% over all years) is higher than the percentage of IDUs in the total population of HIV patients (3.4%), but that the percentage of IDUs among the AIDS deaths is even higher: 13% of the AIDS patients dying since 2002. This indicates that the disease course in injecting drug users is less favourable than in other risk groups. Compared with the reference group heterosexuals, the hazard ratios for injecting drugs users for mortality from the start of cART is increased (hazard ratio 1.235; 95% CI 0.978-1.560). MSM have even a more favourable hazard ratio for mortality compared with heterosexuals (0.851; 95% CI 0.728-0.994) (SHM Monitoring report 2013, web appendix).

Table 6.2.2: Number and percentage of recorded AIDS patients and deaths, by route of transmission

Transmission group	AIDS patients diagnosed in 2013 <sup>1</sup>	Cumulative AIDS patients diagnosed <1987-2013	Deaths among HIV/AIDS patients in 2013 <sup>1</sup>	Cumulative deaths 2002-2013
Total	155	9150	124	1706
Injecting drug use	2	728	12	222
	1.3%	8.0%	9.7%	13.0%
MSM	78	5326	69	848
	50.3%	58,2%	55.6%	49.7%
Heterosexual contact	48	2346	32	432
	31.0%	25.6%	25.8%	25.3%
Other/ unknown	27	750	11	204
	17.4%	8.2%	8.9%	12.0%

AIDS cases were registered by the Health Inspectorate before 1999 and from 1999 onwards by the HIV Monitoring Foundation. Figures are adjusted constantly because of reporting delays. I. Incomplete data for 2013. Note the different time periods for cumulative AIDS diagnoses (<1987-2013) and cumulative deaths (2002-2013). Source: HIV Monitoring Foundation/ RIVM (Van Aar et al., 2014).

## 6.2.3 Hepatitis B and C

## Prevalence in the population

- The Netherlands is a low hepatitis B and C endemic country. In the "Pienter studies" (national representative serological surveys held in 1995/1996 (Pienter 1) and 2006/2007 (Pienter 2) in the Dutch population aged 0-79 years), the prevalence of hepatitis B and C infection was established (Hahné et al. 2012; Vriend et al. 2012). These studies are the main source of information on the prevalence of HBV and HCV infection in the general Dutch population.
- In 2007, the weighted anti-HBc prevalence was 3.5% (95% CI 2.2-5.5), the HBsAg prevalence 0.2% (95% CI 0.1-0.4) and the weighted national HCV seroprevalence of 0.30% (95% CI 0.05-0.55%) (Vriend et al. 2012). The study probably underestimates the true population prevalence, as high risk groups, such as injecting drug users, are likely to be underrepresented. Most HCV-positive individuals in the Nteherlands (70%) are born in a HCV endemic country. Vriend et al. (2013) estimated the number of IDUs living with HCV -antibodies at 7,752 (759 HIV-positive IDUs (range 603-1,017) and 6993 HIV-negative IDUs (range 7009-15,263)). In their estimate, IDUs were the second largest group of HCV-positive individuals.
- Patients with chronic hepatitis C or B infections are at risk for development of liver fibrosis, which may lead in 20-25 years to cirrhosis, end-stage liver disease and hepatocellular carcinoma. In the presence of (untreated) HIV infection, the disease progression may be more rapid.

#### Notification data

Notification data are reported by the municipal health services to the National Institute of Public Health and the Environment (RIVM). It is of note that estimating the incidence of hepatitis B and C based on notification data of acute cases will give an underestimation, as a large percentage of new infections remain asymptomatic. However, they may (in the long run) give indications of trends on the incidence of these infectious diseases.

## Hepatitis B

Since 1976 acute hepatitis B infections have to be notified to the Health Care Inspectorate (IGZ). In April 1999, newly diagnosed chronic and subclinical HBV infections also became notifiable diseases. The data show that from 1976 to 1981 the incidence of hepatitis B in the population increased (probably due to the introduction of the obligation to notify the disease, the large-scale availability of serological tests and the screening programs among blood donors). Since 1981 the incidence has decreased again, which can be attributed to the availability of a vaccine and the decrease in sexual risk behaviour as a reaction to the aidsepidemic. In 1995, the number of acute hepatitis B cases among people with injecting drug use peaked with 24 cases, but a sharp decrease has taken place since then. In recent years, injecting drug use plays only a marginal role in newly diagnosed acute and chronic hepatitis B infections.

- In 2013, 130 acute cases of hepatitis B infection were notified. In the 93 cases with known route of infection, none were infected through injecting drug use. Also in the preceding years notifications of acute hepatitis B among injecting drug users were rare: 0 cases in 2012 and 2011, 1 case in 2010, 0 cases in 2009 and 2008. Unprotected sexual contact (including MSM and heterosexual) was found to be still the most important risk factor (source: F. van Aar, RIVM).
- Chronic infections with hepatitis B were reported in 1,109 cases in 2013. In 3 of the 808 (0.3%) chronic infections with known route of infection, injecting drug use was regarded as the vector, comparable with previous years (2012: 9 of 1,004; 2011: 3 of 1092; 2010: 13 of 1,112; 2009: 6 of 1,251; 2008: 3 of 1,108) (source: F. van Aar, RIVM).

## Hepatitis C

Hepatitis C is a notifiable disease since April 1999. Until October 2003 both chronic and recent HCV infections had to be reported to the Health Care Inspectorate within 24 hours after the diagnosis (positive test for HCV or HCV-RNA-PCR, with or without clinical symptoms). Since October 2003, this procedure only applies to (suspected) acute or recent infections. As acute infections are often asymptomatic, an unknown rate of missed diagnoses and underreporting is possible. Up to 2004, IDUs were the main risk group for acquiring an acute HCV infection, but since 2006, most acute HCV infections are found in MSM, especially HIV-positive MSM (source: RIVM).

• In 2013, 62 cases of acute hepatitis C infection were notified. The transmission route of 57 of these 62 cases was reported; in 2 cases (4%) injecting drug use was the most likely route of transmission (source: F. van Aar, RIVM). In previous years, the contribution of the transmission group IDU in the total number of acute HCV infections with known route of infection fluctuated between 2 and 16%.

#### Treatment data and other sources

Screening of drug users in drug treatment on infectious diseases is increasingly part of routine care but test results are only available for a few treatment centres. Note that recruitment site can influence the prevalence point estimates. It has been shown that, among others in the Netherlands, HCV prevalence is significantly higher in IDUs recruited in drug treatment centres, compared with low threshold services and other settings (Rondy et al. 2012).

HIV Monitoring Foundation. A rather substantial data source on hepatitis infections in (former) IDUs is the database of the national HIV/ AIDS registration of the HIV Monitoring Foundation (SHM). In total 19,417 HIV-infected patients were tested for a co-infection with HBV and 18,718 for a co-infection with HCV (Van Sighem et al. 2013). In this cohort, chronic active HBV co-infection was found in 8% of HIV patients and 24% were successfully vaccinated (anti-HBc-negative and anti HBs positive). The prevalence HCV antibody / HCV RNA positives was 12%. Of those with a known HCV RNA testresult, 20% cleared the virus spontaneously.

- 13.9% of the tested injecting drug users were HBsAg positive, which is higher than in MSM (9.0%) and heterosexuals (8.3%) (Van Sighem et al. 2013).
- The vaccination rate (anti-HBc-negative and anti HBs positive) in (former) injecting drug users (7%) was much lower than in MSM (28%) and heterosexuals (20%) (Van Sighem et al. 2013).
- (Former) injecting drug users were heavily affected by HCV infections. The prevalence of chronic active HCV ranged from 54-61% between 1998 and 2012. In MSM, the prevalence of chronic HCV infections was 4% in 1998, increased to 6% in 2005 and 2006 and dropped again to 4% in 2012.
- In contrast, the incidence of acute HCV-infections was low for injecting drug users (overall 0.4/1000 person years, 95% CI 0.01-2.22), compared with MSM (0.47 diagnoses/ 1000 person years in 2003, which increased to 4.5/ 1000 person years in 2011). The high background prevalence of HCV infections in drug users may explain these differences (Van Sighem et al. 2013). Overall, the treatment outcome (as a sustained virological response) of the 421 patients treated with peginterferon and ribaverin for a chronic hepatitis C virus infection ranged from 14% for patients with an unknown virus genotype to 42% of patients with virus genotype 3 (genotype 1: 22%; genotype 2: 30%; genotype 4: 35%) (Van Sighem et al. 2013).

The Public Health Service of Amsterdam (GGD Amsterdam) collects information on hepatitis B and C infections in methadone clients participating in low threshold services. Patients are tested exhaustive, but not every year. A selection bias in those being tested might be the case, e.g., because testing is voluntary and mostly patients are tested with unknown test result (see also 6.2.1) (personal communication M. de Wit, GGD Amsterdam). Data on HBV for 2013 are not available The HCV prevalence data of GGD Amsterdam are also presented in ST09 part 2.

 HCV antibodies were detected in 11 of 28 (39%) tested ever injecting drug users, 6 females and 5 males; they were all aged 34 years or over (source: M. de Wit, GGD Amsterdam). The open and ongoing Amsterdam Cohort Studies (ACS) among drug users (see above) focuses among others on hepatitis C. The study generates a wealth of information, which is also described in the previous National Reports and in § 7.3.

- The HCV incidence has strongly declined in the last years, both in ever-injectors and in never-injectors. Since 2005, the incidence rate is 0.35 cases/ 100 person years (Grady et al 2012).
- However, the HCV prevalence is substantial. The modelled prevalence of chronic HCV infection in (ever) injecting drug users in Amsterdam (n=4353) is 80,7% (Matser et al. 2011).
- In the ACS, all cause and cause-specific standardized mortality ratios were calculated stratified and HCV and HCV status (Van Santen et al, 2014). The overall all-cause mortality was found to be 13.9 (95% CI 12.6-15.3). The all-cause mortality among drug users declined after 1996, compared with general population rates, which seems to be attributable to a decline in mortality among women. The highest standardized mortality ratios were found for drug users with an HCV/HIV co-infection (61.9; 95% CI 50.4-76.0). Mortality rates due to non-natural deaths also declined significantly (p=0.007) and became closer to those of the general population, although HIV-related mortality remained high compared to the general Dutch population. There were no statistically significant changes in the standardized mortality ratios for HCV monoinfected and HIV or HCV uninfected drug users (Van Santen et al, 2014).
- The study also showed that male sex, IL28B CC genotypes and BMI were independently associated with higher average HCV RNA levels, even after a median follow-up time of 10.8 years after seroconversion (Grady et al., 2014). This information contributes to the existing knowledge on the natural history of HCV infection and could play a role in clinical decision-making.
- The Dutch C (Drug Users Treatment for Chronic Hepatitis C) study takes place in the ACS drug users cohort with the aim to evaluate the possibility of HCV testing and treatment combined with methadone programmes (Van Sighem et al, 2013). The projet offers HCV screening and, for drug users who are chronically infected, medical and psychiatric screening and HCV treatment. Since various specialists cooperate, optimal care is provided. Almost 60% of drug users tested positive for HCV antibodies, and 64% of them were positive for HCV-RNA. Of 57 chronically infected drug users that started treatment and had sufficient follow-up after a treatment stop in 2010, 37 (65%) achieved a sustained virological response. Based on the initial success of the project, it was decided in 2007 to also include drug users not participating in the ACS. A total of 88 drug users from the ACS and from methadone clinics in Amsterdam were treated for HCV by the end of 2011. The first active drug user chronically infected with HCV genotype 1 started treatment with telaprevir combined with peginterferon and ribaverin at the public health service Amsterdam in 2012. Treatment and datacollection is still ongoing (Van Sighem et al, 2013).
- Methadone treatment in drug users with hepatitis C infection was found to be associated
  with common bile duct dilatation (Leopold et al., 2014). Almost a quarter of the studied
  222 hepatitits C virus-infected drug users was found to have dilatation of the common
  bile duct, which was associated with current methadone use but not with regular heroin

use. The authors concluded that dilatation of the common bile duct is likely to be a harmless side effect of opioid agonists.

# 6.2.4 Sexually transmitted infections (STIs)

In total 26 low-threshold STI centres, mostly within the public health services, provide free-of-charge STI/HIV testing and care, targeted at several high risk groups (Van Aar et al., 2014). Although injecting drug use is not among the 8 formulated criteria for high risk, data are available for ever and past 6 months injecting drug use. The reporting of this national STI surveillance system has been organised in eight regions since 2006 and is coordinated by the RIVM.

- In 2013, 133,585 new STI consultations were registered, an increase of 10% compared to 2012. However, the proportion of positive tests declined, from 15.1 to 14.7%. Ever injecting drug use was reported by only 308 cases (102 women; 94 heterosexual men; 112 homosexual men). Another 140 persons indicated they had injected drugs in the past 6 months (35 women; 28 heterosexual men; 77 homosexual men).
- The STI test result in women reporting ever injecting drug use was positive in 13% of cases, in ever injecting drug using heterosexual men in almost 15% of cases and in MSM with ever IDU 27%.

In Amsterdam, the Amsterdam Cohort Studies (ACS, see above) has monitored STIs among their participants since the start of the study in 1986. Although in the first years of the study STIs were found in up to 10% of participants, reports of STI have remained relatively stable at around 3% in recent years (Van Sighem et al. 2013).

# 6.2.5 Risk behaviour

The latest figures from the addiction care show that injecting drug use is still decreasing. Although 40% of opiate users who are client at an addiction care institute ever injected, last year injecting dropped to just above 8% and last month injecting was less than 8% in 2013 (Wisselink et al., 2014).

The ACS has been monitoring risk behavior among drug users in the past 28 years.

- In HIV-negative drug users, injecting and borrowing of needles significantly declined between 1985 and 2012 (van Sighem et al 2013). While more than 55% of drug users visiting the ACS in 1986 reported injecting, this declined to around 10% in 2012. In line with that, use of needle exchange also decreased to less than 10% and borrowing was reduced to virtually zero.
- Reports of high sexual risk behaviour decreased before 1996, remained relatively stable until 2005 and further decreased to approximately 24% (of drug users visiting the ACS) in 2012 (van Sighem et al. 2013).
- In an analysis of injecting behavior data, five distinct longitundinal trajectories of injecting were identified (Mikolajczyk et al, 2014). The majority of patients (69%) had stable risk injecting behavior, the others displayed a decrease in injecting over time. The patterns were related to sociodemographic and drug use variables and are reflected in the incidence of HIV infections. Those with longer duration of injecting at cohort entry and

those who entered the cohort in earlier years tended to have continuing high risk behavior.

# 6.3 Other drug-related health correlates and consequences

In this paragraph new data are presented on drug-related emergencies (§ 6.3.1), and psychiatric comorbidity (§ 6.3.2).

#### 6.3.1 Drug-related emergencies

Like last year, this report restricts itself to one source for trend data on drug-related emergencies, being the Monitor drug-related emergencies, which collects information in a selected number of regions. The ambulance transportation data in Amsterdam, providing trends since many years, has been unable to report data from 2012 due to changes in the reporting system. The most important trend seen in 2013 is that the previous sharp increase in both the number of ecstasy-related emergencies, as well as in the level of intoxication in these emergencies, is leveling off.

# Monitor drug-related emergencies

Since 2009, data on drug-related emergencies are collected from a selected number of regions as well as from several (nationwide operating) emergency posts on dance events by the Monitor drug-related emergencies (Monitor Drugs Incidenten, MDI). The number of participating regions increased from four in 2009 to six in 2010 and eight since 2011. The regions are selected in such a way that they are indicative for the situation in the country. Note however, that they only cover a part of the country and the monitor does not provide an overview of all drug-related emergencies that occur in the Netherlands. Cases are reported by ambulance transportation services, emergency departments in hospitals, forensic doctors, and organisations with a first aid medical post at dance parties. In 2013, a total of 29 local institutes participated. As mentioned above, data from the ambulance transportation service Amsterdam and also Purmerend are not yet available and for comparability over the years, the data from these ambulance transportation services from previous years are also not reported. The collected information includes data on the drugs used, level of intoxication, and demographics. Information of alcohol use is only collected when this took place in combination with drug use. Since the type of emergencies may substantially differ between the participating medical services, data are reported separately where necessary.

- In 2013 3,481 emergencies were reported by the participating institutions in the selected regions (Croes and Vogels 2014) (tables 6.3.1 and 6.3.2). Between 2009 and 2013, the cumulative number of reported cases was 12,256 (excluding the data from ambulance transportation services Amsterdam and Purmerend).
- Patients were predominantly male and the majority of patients were 25 years or older.
- Characteristics of the patients and sort of emergencies differed between the various services. The majority of patients consulting the medical posts at large parties reported an ecstasy-related problem, Further, level of intoxication was mildest in the patients consulting these medical posts. Ambulance transportation services were relatively often confronted with problems after GHB use. In contrast, forensic doctors saw relatively

- frequent patients after use of stimulant drugs, as well as problems after combination use of several drugs or drugs and alcohol.
- In Amsterdam, tourists had a substantial contribution in the emergency cases. Their
  problems occurred predominantly after using cannabis or magic mushrooms. It has to be
  acknowledged that, in general, drug-related emergencies at the capital differ from those
  in other cities.
- The most important findings were a leveling off of the previously sharp increase in number of ecstasy-related problems at large parties. In 2013 62% of all drug-related emergencies at first aid posts of large parties were related to the use of ecstasy (without combination use with other drugs). 22% of these ecstasy-related patients were moderately or severely under the influence. Level of intoxication is defined as "light" when the use of drugs is noticeable, but the patient is more or less adequately reacting; a "moderate" intoxication refers to the state in which the patient is inadequately reacting and clearly under the influence; and "severely" intoxicated are those patients with whom communication is not possible (either because they are in a (sub)coma, or they are highly agitated and aggressive), which may be combined with disturbance of the vital parameters.
- Further, the contribution of GHB increased in the emergencies that were presented at
  the emergency department of the hospitals (from 8% in 2009 to 18% in 2013) and at the
  forensic doctors (from 6% in 2009 to 15% in 2013). The largest increases, however,
  were up to 2012, and comparable with ecstasy, there seems to be a leveling off of this
  trend.
- New psychoactive substances were only rarely reported. 4-FA was the largest group, although this only played a role in 17 emergencies in 2013.
- In 2013, 13 patients registered in the monitor died. The most likely causes of death were GHB overdose (1 patient), heroine overdose (3 patients), cardiac arrest after amphetamine use (2 patients) and cocaine use (3 patients), hyperthermia after ecstasy consumption (2 patients), polydrug use (1 patient) and 1 trauma (accidental fall) after cocaine use.

Table 6.3.1.: Characteristics of emergencies registered by the Monitor drug-related emergencies (MDI) by medical service, 2013

	Ambulance transportation service	Hospital emergency dept	Forensic doctors	Emergency posts at parties	
	N=947	N=583	N=341	N=1610	
Sex Male Female	72 28	78 22	87 13	60 40	
Age 0-24 years 25+ years	37 63	39 61	27 73	67 33	
Level of intoxication Light Moderate Severe	27 52 21	32 37 31	53 39 8	70 25 5	
Type of incident Intoxication Trauma	94 6	85 15	90 10	100 0	
Deceased	1 patient	2 patients	8 patients	2 patients	
Combination of drugs Yes No	18 82	28 72	19 81	15 85	
Combination with alcohol Yes No Unknown	41 22 37	53 36 11	42 40 18	43 57 0	
Tourist Yes No Unknown	1 28 71	20 63 17	3 41 57	13 87 0	

In percentages. Due to rounding, percentages do not always exactly sum up to 100. Not including the data from the ambulance transportation services of Amsterdam and Purmerend. Note that this table includes all drugs and that the distribution of drugs used is not comparable across the medical instances (see next table). Source: Monitor drug-related emergencies, Trimbos Institute, Netherlands Institute of Mental Health and Addiction (Croes and Vogels 2014).

Table 6.3.2 summarizes the contribution of the separate drugs to the total drug-related emergencies. Note that the figures refer to single drug use, except for the category "combination of drugs". Some additional remarks:

- Cannabis: a severe level of cannabis intoxication is often accompanied by high alcohol consumption. Synthetic cannabinoids (spice) are not a major cause for emergencies.
- Ecstasy: the increase in the level of intoxication in ecstasy-related emergencies is leveling off. Note however that the average MDMA concentration in ecstasy pills as well as the proportion of pills with a high dose is still increasing (data from DIMS). Several cases of hyperthermia and/ or hyponatremia were reported.
- GHB: Compared to the relatively limited use of GHB in the general population, the number of emergencies after use of this drug is remarkably high. One fifth of reported emergencies is related to GHB use, as only drug or in combination with another drug. In the hospitals, the increase in GHB-related emergencies observed last year is still ongoing, though on a lower level, as is the case in patients seen by the forensic doctors, but not in the other settings, where an increase has not been visible. More than half of the patients is severely intoxicated when presented at the hospital.
- Cocaine-hydrochloride: use of cocaine-HCl is often combined with alcohol use. The
  reported cases of severe intoxications often had cardiac symptoms or were aggressive
  or delirious.
- Amphetamine: use of amphetamine causes only a limited number of emergencies; nevertheless, several cases with fatal outcome were reported in the monitor in the last couple of years.
- Heroin and cocaine base: a limited number of reported emergencies is related to the use of these drugs, which are traditionally associated with the "problematic" hard drug scene.
- Magic mushrooms: emergencies after use of magic mushrooms are a local phenomenon almost limited to Amsterdam and often involving tourists. There is no differentiation in the monitor between the since December 2008 illegal forms (in Dutch: "paddo's") and the legal substitutes (sclerotia), because the distinction between these is (too) complex to make for health care workers treating the patients.
- Combination use of two or more drugs is associated with more severe levels of intoxication. Data from the monitor show that the more drugs (and alcohol) are used, the higher the level of intoxication.

Table 6.3.2: Types of drugs involved in the emergencies documented by the Monitor drugrelated emergencies (MDI), 2013

	Ambulance transportation service N=947	Hospital emergency dept N=583	Forensic doctors N=341	Emergency posts at parties N=1610
Cannabis	18	22	19	6
Ecstasy	6	7	4	62
GHB	20	18	15	10
Cocaïne-HCI	10	7	24	1
Amphetamine	4	3	6	4
Opiates	7	2	7	0
Magic-Mushrooms	1	2	3	0
Other/unknown drug	14	9	2	2
Combination of drugs	18	28	19	15
Total	100	100	100	100

In percentages. Note that the drugs mentioned refer to single drug use, except for the row "combination of drugs". However, in all drug categories, drug use in combination with alcohol is possible. Because of small absolute numbers, the percentages for basecoke, ketamine en LSD are not included. Source: Monitor drug-related emergencies, Trimbos Institute, Netherlands Institute of Mental Health and Addiction (Croes and Vogels 2014).

# 6.3.2 Psychiatric comorbidity

As described in previous National reports, drug use disorders are commonly associated with other mental health disorders.

In the IASP study (International ADHD in substance use disorder prevalence study), which is coordinated in the Netherlands, comorbidity patterns were determined in 1205 treatment-seeking substance use disorder patients with and without adult attention deficit hyperactivity disorder (ADHD) (van Emmerik-van Ootmerssen et al., 2014). The authors found that treatment-seeking substance use disorder patients with ADHD were at a very high risk for additional externalizing disorders. Seventy-five percent of substance use disorder patients with ADHD also had an additional (third) comorbid disorder, which is double the amount of substance use disorder patients without ADHD, of whom 37% also had an additional comorbid disorder.

Data from the Netherlands Mental Health Survey and Incidence Study-2 (NEMESIS-2), a representative sample of the Dutch population, were used to study the prevalence of ADHD in adults 18-44 years old (Tuithof et al, 2014). They concluded that twothird of children with ADHD still has this disorder as an adult. ADHD as an adult was (among others) highly

related with substance use problems. While 2.1% of adults without ADHD had any drug disorder (drug abuse: 1.9% and/or drug dependence 0.7%), this was statistically significant higher in adults with ADHD (20.5% had any drug disorder: 18.5% drug abuse and/ or 12.6% drug dependence).

In the CANDEP study (see also § 4.4 and National Report 2013), the prevalence of mental disorders was compared between frequent cannabis users with (n=252) and without (n=269) dependence, the general population (n=1072) and clients in treatment for cannabis dependence (n=70) (Van der Pol et al. 2013a and 2013b).

While dependent frequent cannabis users more often had mental disorders in comparison with both non-dependent frequent cannabis users and non-(frequent) using peers, the mental health of the two latter groups was mostly comparable (Figure 6.3.1). Although non-dependent users had more often externalising disorders than non-(frequent) users, these typically developed before cannabis use onset. Therefore, they are regarded to be a risk factor for early and frequent cannabis use, rather than a consequence of frequent cannabis use. Since childhood adversities, self-reported cannabis use patterns and cannabis use habits were very similar in frequent users with and without dependence, these factors did not explain the observed mental health differences.

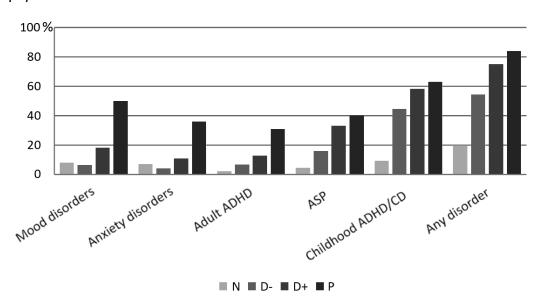


Figure 6.3.1 Unadjusted prevalence of 12-month mental disorders in CanDep's four populations.

N: General population of non-users and non-frequent users (N=1,072). D- Non-dependent frequent cannabis users (N=348). D+ Dependent frequent cannabis users (N=252). P: Treatment seeking cannabis dependent users (N=70). All 18-30 years.

Finally, a qualitative study study on the everyday life consequences of substance use in adult patients with a substance use disorder and co-occuring ADHD or autism spectrum disorder concluded that substance use is reported to solve some ADHD or autism spectrum disorder related problems in the short run, but have negative consequences in the long run (contribute to already impaired cognitive functioning) (Kronenberg et al, 2014). The study

provides insights for clinicians to break this vicious circle of the causes and consequences of substance use.

# 6.4 Drug-related deaths and mortality of drug users

#### National level

In the Netherlands, statistics on drug-related deaths at national level come available each year from the General Mortality Register (GMR), or Causes of Death Statistics, held by Statistics Netherlands (CBS). In this national register the causes of death are classified according to the International Classification of Diseases, Injuries and Causes of Death (ICD). The 10th edition of the ICD has been in use in the Netherlands since 1996. Although the register has national coverage, in its standard form it only includes deceased residents of the Netherlands who were registered at a municipal register. However, data on drug-related deaths among non-residents are available from an additional database.

The General Mortality Register (GMR) specifically provides data on acute mortality due to drug use, that is poisoning by drugs or drug 'overdose'. These are the cases in which death is directly related to drugs.

#### Overall trend

Figure 6.4.1 shows the number of cases recorded from 1996 up to including 2012. Due to the transition to automatic coding of the death certificates at Statistics Netherlands (CBS), the data are only available up to including 2012. The cases are selected according to the EMCDDA standard selection of ICD-codes. The figure only includes cases from residents that were registered at a municipal register. Among non-residents, an additional 16 cases were registered in 2012 in a separate archive. Between 1996 and 2012, the total number of recorded drug-related deaths among residents fluctuated between a minimum of only 94 cases in 2010 and a maximum of 144 cases in 2001.

- Despite some fluctuations over the years, the total number of drug-related deaths in the Netherlands has remained relatively low. This might be explained by a low number of socially marginalized problem drug users, successful harm reduction measures among the problem drug users, and protective factors, such as the nationwide availability of methadone-maintenance treatment, heroin-assisted treatment, and a low rate of intravenous drug use.
- Cases of "opiates" and "cocaine" refer to cases in which these substances were explicitly stated as the primary cause of death on the death certificate. From 1996 up to including 2001, opiate intoxications were the most common causes of drug-related death recorded among Dutch residents. The number of opiate deaths slowly decreased over the past decade. In 2012 the number of opiate cases (28) came close to the number of cocaine cases (22).
- In 2012, there were only 3 cases that were coded to poisoning by psychostimulants (other than cocaine), compared to just four cases in 2009, two cases in 2008 and 2011, and only one case in 2007 and 2010. Whether these fatal intoxications concerned amphetamines, MDMA, or other psychostimulants is not known.
- The number of cases in the category "Other" slowly increased over the years and in 2012 made up 58% of all the acute drug-related deaths, more than the opiates and

cocaine cases taken together. In some of these cases it was not clear to which specific drug the death ought to be attributed. Nonetheless, an analysis of these cases has shown that these cases were clear cases of "acute drug-related death".

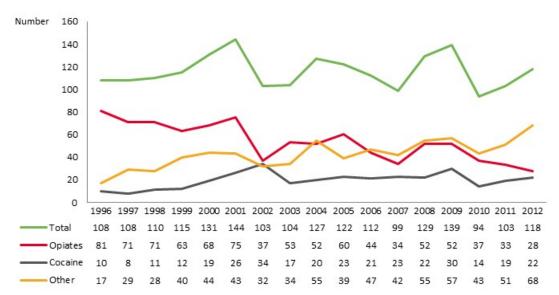


Figure 6.4.1: Number of acute drug-related deaths in the Netherlands according to the EMCDDA selection of ICD-10 codes from 1996 up to including 2012<sup>1</sup>

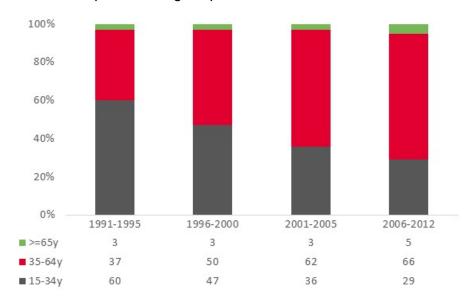
I. Only residents that were registered at a municipal register in the Netherlands are included. Among non-residents, an additional 16 cases of acute drug-related deaths were registered in 2012. EMCDDA selection of ICD-10 codes: F11-F12, F14, F16, F19; and X42, X41, X62, X61, Y12, Y11 (selected in combination with T40.0-9 or T43.6). Source: Causes of Death Statistics, Statistics Netherlands (CBS).

#### Age and gender

The population of problem drug users is ageing, and this trend is reflected in the increasing age of drug users that have died from drugs. Figure 6.4.2 shows that the percentage of deceased aged 35 years and above increased from 40% during the period 1991 up to including 1995 to 71% during the period 2006 up to including 2012.

Between 1996 and 2012, the percentage of female cases varied from 15 to 28% per year, without showing a clear trend. In 2012, the proportion of female cases was 19%.

Figure 6.4.2: Trends in the age distribution of cases of acute drug-related deaths in the Netherlands, according to the EMCDDA definition, from the period 1991-1995 up to including the period 2006-2012



Source: Causes of Death Statistics, Statistics Netherlands (CBS).

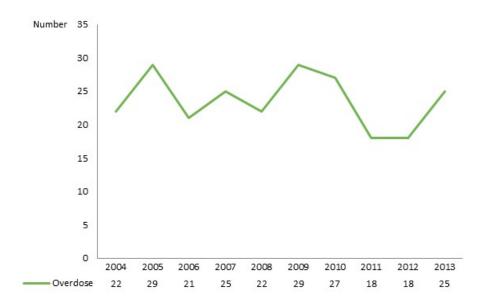
# Regional level: Amsterdam

The Public Health Service of Amsterdam (GGD Amsterdam) traces drug-related deaths by means of the Central Methadone Register. This regional monitor is part of the Public Mental Health Care monitor (OGGZ monitor) of Amsterdam (Buster and Van Brussel 2011). The data on the fatal poisonings ('overdoses') from the Amsterdam coroners also include non-residents who are not included in the Population Registry. Figure 6.4.3 gives the number of acute deaths (overdoses) that were found according to this procedure among the drug users in Amsterdam. Between 2004 and 2013, the number of acute deaths fluctuated around an average of 24 acute deaths per year. The number of 18 cases in 2011 and 2012 was the lowest number since 1978.

From the 25 cases in 2013, 6 were female, 19 were male, and the average age was 42 years. The following substances were found: opiates (12 times), cocaine/amphetamines (6 times), GHB/GBL (4 times), poppers (2 times), and MDMA (1 time).

Apart from the fatal poisonings ('overdoses'), no new data have become available from the mortality cohort study in Amsterdam (ST18\_2012\_NL\_01).

Figure 6.4.3: Number of acute deaths (overdoses) among drug users in Amsterdam from 2004 to 2013



Source: Public Health Service of Amsterdam (GGD Amsterdam).

# 7 Responses to health correlates and consequences

#### 7.1 Introduction

In this chapter information is provided on prevention of health consequences related to both recreational and problematic drug use. We describe actions related to acute drug-related health emergencies (§ 7.2), harm reduction measures including needle and syringe exchange and drug consumption rooms, and treatment for hepatitis C (§ 7.3) Finally, § 7.4 briefly comments on activities on other health correlates (psychiatric and somatic).

# 7.2 Prevention of drug-related emergencies and reduction of drug-related deaths

#### Drug-related emergencies

In 2008, the "Monitor drug-related emergencies" (Monitor drugsincidenten) was set up with a two-fold aim: (1) to monitor trends in drug-related emergencies (via a basic registration), which can be used for informed policy making, and (2) to pick up acute life-threatening situations (via case reports) which are used to inform the network of participating (para)medical institutions and can be used for acute actions, like a "red alert" (Croes and Vogels 2014).

The 'Monitor drug-related emergencies' works closely together with the DIMS project, which, besides having a monitoring function, also aims to prevent drug-related health problems (for more information: see § 3.3). This collaboration has proven to be very useful in concerted actions on the recent disturbances on the ecstasy market (especially high MDMA concentrations), and the monitoring of new psycho-active substances. Currently, several projecta are ongoing in reaction to the increased number and severity of ecstasy-related health emergencies at first aid posts.

Under the influence of drugs, aggression and violence may more easily develop. The Trimbos Institute and Bureau Beke developed a training for the police and security personnel to be better equipped when facing violence by drug users. The course takes half a day.

# 7.3 Prevention and treatment of drug-related infectious diseases

#### 7.3.1 Needle/syringe exchange

Estimates several years ago from Mainline (a grassroots organisation for drug users in Amsterdam) and the Trimbos Institute suggest that there are approximately 150 needle/syringe exchange programs in the Netherlands. This is a rough estimate of the minimum number of exchange programs, because for some cities it has been reported that pharmacists are also exchanging syringes. On the other hand, there are also reports of merging of several sites as well as closure, which may cut down the estimated number. However, new estimates are not available. In Amsterdam and Rotterdam trend data on the numbers of syringes that were exchanged are available from the municipal health services.

In both cities, a decreasing trend in the number of exchanged syringes has been observed, which is still ongoing in Rotterdam, but stabilized in Amsterdam since 2007 (see figure 7.3.1).

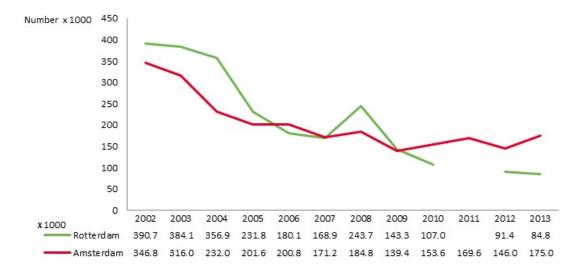


Figure 7.2.1: Number of syringes exchanged in Amsterdam and Rotterdam 2002-2013

Source: GGD Amsterdam and GGD Rotterdam. For 2011, no data are available from Rotterdam.

- In Amsterdam, figures are available since 1990. After a steady increase until 1993 (1,082,880 syringes were exchanged in that year), the number of exchanged syringes declined and slightly fluctuates below 200,000 syringes per year since 2007 (175,000 in 2013) (source: M. Buster, GGD Amsterdam).
- In Rotterdam, figures are available since 2000. The number of syringes ordered by the
  local distribution centres was reduced between 2000 and 2013 from 422,400 to 84,800
  (source: R.A. Wolter, GGD Rotterdam). Data for 2011 are not available due to a change
  in the registration system. It is noteworthy that in Rotterdam during evening and nightly
  hours drug users can exchange needles and syringes at several police stations.
- The decline during many years in the number of syringes exchanged can be explained by several factors: a reduction of injecting heroin users in general; a reduction of drug users, often injectors, from neighbouring countries; a reduced popularity of injecting resulting from experienced health problems, in combination with an increase in the use of crack; and mortality among injectors. It is assumed that the far majority of drug users in need of clean needles are being reached with the current efforts.

# 7.3.2 Drug consumption rooms

Harm reduction is a central feature in the Dutch drug policy and drug consumption rooms, offering a combination of care and support, play an important role in this. In the eighties, harm reduction facilities grew rapidly, with a focus on methadone supply and needle and syringe exchange. The first supervised drug consumption room officially opened in 1994. In 2013, an inventory showed 17 consumption rooms only for drug consumption, 6 consumption rooms only for the consumption of alcohol, and 14 locations where the consumption of both drugs and alcohol is allowed, although the consumption of drugs and alcohol is separated in different quarters of the location (Laghaei et al, 2014). Often,

consumption rooms are located at a facility that also offers other services, including methadone supply, daycare, 24-hour facilities, etc. They are mainly distributed in the central regions of the country, where the largest cities are.

- Drugs consumption rooms are located in 25 cities. After an initial increase in their number (from 20 in 2001; 32 in 2003 to 37 in 2010), the number of drug consumption rooms was recently reduced to 31 in 2013 (Laghaei et al, 2014). One of the reasons for this cutback is a reduction in the number of visitors, which is partly the result of another successful program that aimed to actively bring homeless people into (supervised) living projects, where the use of drugs often is allowed (Plan van Aanpak Maatschappelijke Opvang, see also chapter 8). Thanks to this project, (formerly homeless) drug or alcohol users no longer need to consume the drug on the street, which was a major reason for the popularity of drugs consumption rooms, offering a quiet moment for drug use.
- Alcohol consumption rooms are a relatively new phenomenon in addiction care. In 20 cities, rooms for the consumption of alcohol are available. They do not all have similar rules in place. Differences are among others in the amount of alcohol that is allowed to be consumed, the type of beverage, the periods of use and breaks in between. A few of the alcohol consumption rooms only allow alcohol to be used which is supplied by the institution itself. Some require testing of the alcohol promillage at entrance.

One of the main targets of consumption rooms is reduction of criminal actions and nuisance at the streets. However, also reduction of health damage is an important aspect. For health workers, this is a rather successful way to come into contact with this hard to reach population and the majority of the consumption rooms offer basic care, try to stabilize the substance use of the client of try to lead him/ her into care.

#### 7.3.3 Effect of harm reduction on hepatitis C and HIV prevalence

The Netherlands has a long standing tradition on harm reduction in drug users, which also has an impact on the prevalence of HCV and HIV.

• De Vos et al (2014) examined the potential of treatment as prevention for reducing HIV incidence among injecting drug users, by using data from the Amsterdam Cohort Studies. They concluded that a test and immediate treat strategy for HIV among injecting drug users could lead to great reductions in incidence. However, over the complete HIV epidemic in Amsterdam, the historic use of cART has led to only 2% less incidence in injecting drug users. Thus is explained by the finding that individuals are treated from low CD4 cell counts, and their decreased infectiousness is offset by increased infectious lifetime. The autors recommend to combine treatment as prevention with other interventions, with behavioral intervention directed at those not yet HIV infected, to fully eliminate the spread of HIV.

# 7.3.4 Hepatitis C treatment

Some locations of the addiction care have a well organised hepatitis C treatment support trajectory. However, in the majority, still little attention is paid to hepatitis C care. A number of reasons have been identified and reported in the previous National Reports (see also Croes and Van der Veen 2012). To give a boost to hepatitis C treatment in the addiction

care, a project called *Break through in hepatitis C in the addiction care*, run from September 2013 to September 2014. The central coordination was at the Trimbos Institute and 10 local teams participated. The project resulted in local teams having organised a HCV trajectory that fits the local circumstances and that has been described in a protocol ("care path"), which facilitates embedding in regular care. The local teams have been supported by an expert group with members that have experience with best practices of hepatitis C care, both from the addiction care side as from the hospital side. The project resulted in a long list of unexpectedly simple solutions for daily problems in the hepatitis C care. These best practices are now being collected and will be used for further dissemination to all other locations of addiction care. See also: http://www.hepcverslaving.nl/.

Developments in medication have given a boost to the awareness for hepatitis C and also B. Attention is given to the education of general practitioners, to make them more familiar with hepatitis symptoms and risk factors (see for example http://www.liverdoc.nl/bibhep). A national hepatitis day is being organized again (after several years of absence) and also in other risk groups (mainly migrants) projects to trace carriers are ongoing. Despite these efforts, still few people are diagnosed or treated. In the last months of 2014, a national hepatitis steering group will be established, with members from public health and curative health sectors. From 2015-2017, the steering group will have the task to implement better hepatitis care, reaching patients in need of treatment with adequate medication, but within financial limits. The ministry of health supports the steering group, but is not a member. The National Institute for Public Health and the Environment (RIVM) coordinates and facilitates the activities of the steering group.

# 7.3.5 Other prevention activities

The Ministry of Health, Welfare and Sports (VWS) finances the national Network of Infectious Diseases & Harm Reduction, co-ordinated by the Trimbos Institute. The focus of the program is to embed prevention and care of infectious diseases (from case finding to treatment) and harm reduction facilities and measures (such as drug and alcohol consumption rooms and needle exchange), in policy and work processes of the addiction care system. The Network operates by applying and standardising knowledge from policy. research and practice, together with medical and other staff of addiction care and other organisations. In the Network all addiction care organisations are represented, as are two large Municipal Health Services, grassroot organisation Mainline and the prison health department. Activities in 2013 and 2014 included exchange of information in Network meetings; distribution of the email newsletter Update Infectious Diseases & Harm Reduction (three times a year to over 400 addresses); contribution to the break through project on case finding and treatment of hepatitis C; contribution to the improvement of the physical screening of drug users; and developing, testing and making available of an e-learning on physical screening, workshops and other training materials for medical and other staff. Furthermore, surveys are conducted, f.e. to investigate policy on hepatitis B vaccination in addiction care, to learn on the degree of knowledge on infectious diseases of drug users, and to explore changes in harm reduction facilities.

# 7.4 Responses to other health correlates among drug users

As described in previous National reports, drug use disorders are frequently associated with other mental health disorders. In the past decade the number of facilities for the treatment of comorbidity in institutes for mental health care, addiction care, and supported living has increased. Since 2009, a national centre for expertise and implementation has been in operation which offers basic and follow-up training courses in professional development and in-depth courses. The national centre boosters on specific aspects of integrated treatment, and offers advice and coaching on implementation on-the-spot. The centre is called Landelijk Expertisecentrum Dubbele Diagnose (LEDD), which can be translated as: National Centre of Expertise on Double Diagnosis. Self help groups are important in this field.

Drug use is also associated with a range of somatic disorders. Most of the somatic problems associated with drug use are not unique for drug users but are common in other risk groups as well or are associated with the aging population in general. Therefore, most interventions are not exclusive for drug users. As a result, it is often unclear whether the treatment of somatic problems is the responsibility of the addiction care, the general practitioner or whether they should take place in hospital. In general, the attention for somatic co-morbidity in problematic drug users in the Netherlands is rather low.

However, there are some indications for a reversal. For example, the Dutch association of addiction care physicians (VVGN) has organised several symposia in 2013 and 2014 on drug-related emergencies and somatic disorders.

# 8 Social correlates and social reintegration

#### 8.1 Introduction

The social situation in general

The social state of the Netherlands in general is monitored by The Netherlands Institute for Social Research (SCP). Because of the current economic crisis, the SCP in its "Annual Integration Report" for 2013 focused on the labour participation of migrants (Huijnk et al. 2014). Unfortunately, indications were found of a worsened level of social integration of migrants. In 2012, 16% of the non-Western migrants were unemployed, compared to only 5% of the native Dutch. Moreover, 28% of the young non-Western migrants (aged 15-24 years) were unemployed, compared to only 10% of their native Dutch counterparts. In addition, the report on perceived discrimination confirms that migrants experience the most discrimination, especially when applying for a job (Andriessen et al. 2014). The "Poverty Survey" already showed that, in 2012, almost 29% of the non-Western households were at risk of poverty compared to only 7% of the native Dutch households (SCP 2013).

# 8.2 Social exclusion and drug use

#### 8.2.1 Social exclusion of drug users

No systematic new information has become available about the social exclusion of specifically drug users. However, against the background of the economic crisis and the austerities, it should be mentioned that Statistics Netherlands (CBS) has noticed an increase in the number of homeless people. Their number increased from about 23,000 in 2010 to about 27,000 in 2012 (Coumans and Van Beuningen 2013).<sup>29</sup> The proportion of non-Western migrants among the homeless people was 40%. Moreover, the Dutch Association of Mental Health and Addiction Care (GGZ Nederland) has raised the concern that, due to a too fast reduction of inpatient units, the police have already been confronted more often with nuisance evoked by psychiatric patients (Van Rijs 2014).<sup>30</sup> Findings like these suggest that the social exclusion of drug users will have increased (as well).

Another indication about increased social exclusion of drug users is given by the new approach of law enforcement at certain festivals.<sup>31</sup> Security, police, and Public Prosecution have adopted as a new approach to work closely together at some festivals to detect illegal drugs. As a result of this new approach, drug cases at festivals are more often settled by the Public Prosecutor by means of a *disposal to impose sentences* (strafbeschikking). This way, the case is not referred to the Court, but the detected drug user will have to pay a fine or will have to perform a community service. However, some lawyers have noticed that, especially

<sup>&</sup>lt;sup>26</sup>http://www.scp.nl/Publicaties/Alle\_publicaties/Publicaties\_2014/Jaarrapport\_integratie\_2013.

<sup>&</sup>lt;sup>27</sup>http://www.scp.nl/Publicaties/Alle\_publicaties/Publicaties\_2014/Perceived\_discrimination\_in\_the\_Netherlands.

<sup>&</sup>lt;sup>28</sup>http://www.scp.nl/Publicaties/Alle\_publicaties/Publicaties\_2013/Armoedesignalement\_2013.

<sup>&</sup>lt;sup>29</sup>http://www.cbs.nl/nl-NL/menu/themas/bevolking/publicaties/artikelen/archief/2013/2013-4026-wm.htm.

<sup>&</sup>lt;sup>30</sup>http://www.ggznederland.nl/actueel/beddenafbouw-ggz-moet-geleidelijk-gaan.

<sup>&</sup>lt;sup>31</sup>http://www.parool.nl/parool/nl/30700/OPINIE/article/detail/3724544/2014/08/25/Een-advocaat-is-nodig-bij-drugscontroles-op-festivals.dhtml.

young and judicially naive drug users, are not aware of the fact that such a disposal does result in a police record. Being unaware of the consequences, the ignorant drug users actually agree with an out of court settlement to receive a police record. For more and more applications in the Netherlands it is required and checked first that an applicant does not have a police record. Therewith, the social exclusion of drug users from the work force may have increased. Some lawyers argue that the new law enforcement approach, in actual practice, is a violation of the right to a counsellor. It has been planned to change these practices by the 1st of March 2015.

In its defense against the critique of the lawyers, the Public Prosecution Office (OM) argues that, before the start of any interrogation at a festival, the police always informs a suspect about the right to contact a counsellor.<sup>32</sup> Moreover, contacting the Public Prosecutor, after being dismissed by the police, is voluntary. Negotiations with the legal profession about this issue are ongoing.

When becoming involved in criminal activities, drug users may increase their risks to become more and more socially excluded. Recently, the criminal involvement of crack users and their crime specialization has been investigated in the three largest cities of the Netherlands given by Amsterdam, Rotterdam, and The Hague (Oteo Pérez et al. 2015) (see also chapter 4) .<sup>33</sup> It was found that 41.5% "had engaged in crime in the past 30 days, mostly selling drugs (68.9%), followed by property crimes (34.4%) and a few cases of violent crime (9.7%)". Given the fact that heavier patterns of use and homelessness were found to be associated with current criminality, the authors draw the following conclusion: "Reducing drug use among criminally involved crack users and addressing their housing conditions could have a significant impact on reducing drug-related crime." Moreover, it was found that crack users "receiving welfare benefits tended to be more likely to specialize only in selling drugs as opposed to (also) property crimes". From this finding the authors draw the following conclusion: "Welfare benefits might act as protective factor against committing property crimes but not against the selling of drugs."

#### 8.2.2 Drug use among socially excluded groups

With regard to socially excluded groups, information has become available about drug use among homeless people, people with a mild intellectual disability, and male and transgender sex workers.

The "Coda-G4" is a cohort study among *homeless people* in the four largest cities of the Netherlands given by Amsterdam, Rotterdam, The Hague, and Utrecht. The cohort study follows 410 adults (≥ 23 years) and 103 young people for a period of 2.5 years, starting from the moment they reported themselves at a central access point for social relief in 2011. At the first interview in 2011, it was found that cannabis had been used in the past month by 43% of the adult homeless and by 63% of the young homeless (Van Straaten et al. 2014a).<sup>34</sup> At a third interview, one and a half year after the first interview, no statistically significant differences were found for these prevalences (Van Straaten et al. 2014b).<sup>35</sup>

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<sup>&</sup>lt;sup>32</sup> http://www.om.nl/actueel/nieuwsberichten/@163021/waarborgt-rechten/.

<sup>33</sup> http://www.karger.com/Article/FullText/363737.

<sup>&</sup>lt;sup>34</sup> http://link.springer.com/article/10.1007/s12501-014-0004-8.

<sup>35</sup> http://codag4.nl/derde\_rapport.

The substance use among *people with mild intellectual disability* has been explored qualitatively by interviewing 14 professionals from different care sectors and 5 substance-using people with mild intellectual disability (Hammink et al. 2014).<sup>36</sup> It was found that adults with a mild intellectual disability mainly use alcohol, whereas adolescents mainly use cannabis and less frequently alcohol. Although prior research showed that the prevalence of substance use was not higher than the prevalence in the general population, it was nonetheless signalled by the authors that in this group "the consequences are more severe" because substance use among the intellectual disabled "is more likely to lead to problems in different life-domains such as social relations, work, psychiatric disorders or behavioral problems".

In November 2013, the Mainline Foundation, in co-operation with the Public Health Service of Amsterdam (GGD Amsterdam), started a pilot to investigate substance use among *male and transgender sex workers*. The pilot was issued because signals had been received that, under the influence of substances, male and transgender sex workers tend to engage in risky sexual behaviours. The Mainline Foundation has now published the first results, based on 30 questionnaires and three in-depth interviews (Van de Kolk and Knoops 2014).<sup>37</sup> The questionnaires were completed between November 2013 and February 2014. The respondents were recruited in the Dutch cities of Amsterdam and Utrecht, and in the Belgian city of Antwerp. It was found that, from the 30 male and transgender sex workers, 25 of them used substances during the sex work. The most important substances are poppers, sniff cocaine, alcohol, erection enhancing substances, and cannabis. The motivation to use these substances is not yet addiction, but to perform better during the sex work in order to earn more money. Based on these first results, and following the principles of harm reduction, the Mainline Foundation advises to set up specific information material for this target group about the risks of substance use in relation to sex work.

# 8.3 Social reintegration

#### Housing

In the Netherlands, the social reintegration of (former) addicts has been part of the more general Strategy Plan for Social Relief that has targeted all kinds of vulnerable people. The results of this Strategy Plan were monitored each year by the *Strategy Plan for Social Relief Monitor* (Monitor Plan van Aanpak Maatschappelijke Opvang).

The findings for the observation year 2012 (Tuynman and Planije 2013)<sup>38</sup> were presented by the Ministry of Health, Welfare, and Sport to the House of Representatives on the 2<sup>nd</sup> of September 2013. It was found that in 2012, similar to 2011, about 3,500 adult homeless people demanded social relief in the four largest cities given by Amsterdam, Rotterdam, The Hague, and Utrecht. However, the proportion of homeless people who were actually offered an individual care trajectory had decreased from 56% in 2011 to only 41% in 2012. Nonetheless, notwithstanding these austerities, the cities were able to implement some innovations. Amsterdam implemented measures to stimulate the outflow from the social relief, Rotterdam implemented community care within the neighbourhood for former

<sup>&</sup>lt;sup>36</sup> http://link.springer.com/article/10.1007/s12501-014-0016-4.

<sup>&</sup>lt;sup>37</sup> http://www.mainline.nl/fileadmin/mainline/bestanden/PDF/Rapport middelengebruik en sekswerk.pdf.

<sup>&</sup>lt;sup>38</sup>http://www.rijksoverheid.nl/documenten-en-publicaties/rapporten/2013/09/02/monitor-plan-van-aanpak-maatschappelijke-opvang.html.

homeless, The Hague started a pilot for Housing First, and Utrecht introduced integrated financial services for the severe cases.

The findings for the observation year 2013 were published on the 30<sup>th</sup> of September 2014 (Planije et al. 2014).<sup>39</sup> It was found that in 2013 about 3,900 adult homeless people demanded social relief in the four largest cities. In addition to these adults, almost 2,000 young homeless people, or young people at risk of homelessness, demanded social relief. More than 2,000 clients received an individual care trajectory.

The Strategy Plan has run from 2006 until 2014, and has now been concluded. By the end of February 2014, at least 18,188 adults had received an individual care trajectory since the start in 2006, of whom at least 11,208 adults had received a stable mix of housing, income, and treatment. This indicates an overall success ratio of 62%. Notwithstanding the closure of the Strategy Plan, the authors stress that the actual social relief for the homeless has therewith not stagnated. The social relief for the homeless has now to become integrated within the regular policy of the municipalities (Planije et al. 2014). However, given the increased responsibilities of the municipalities to take over social care tasks from the national government by the 1<sup>st</sup> of January 2015, almost half of the municipal civil servants are worried that they will not be sufficiently prepared for their new tasks.<sup>40</sup>

Having started in the registration year 2001, a register-based 10-year follow-up study on mortality among homeless adults (aged 18 years and above) has now been concluded for the city of Rotterdam (Slockers et al. 2014). The study was conducted on a cohort of 2,130 homeless adults, 1,870 male and 260 female, their mean age being 40.3 years in 2001. During the follow-up, a total of 265 homeless people deceased, 232 male and 33 female. The authors conclude that the Strategy Plan for Social Relief had *not* decreased the mortality rate among the homeless people in Rotterdam. However, it should be noticed that a cohort of homeless people "carries the burden of a long previous history of homelessness, unhealthy living circumstances and lifestyles (e.g. use of alcohol and illicit drugs, heavy smoking) and related chronic health problems (e.g. damage to the cardiovascular and respiratory system, such as atherosclerosis and chronic obstructive pulmonary disease)". Among homeless people in the city of Utrecht, it was observed that a substance abuse and/or dependence disorder was associated with a higher mortality rate (Termorshuizen et al. 2014). An authorized that a substance abuse and/or dependence disorder was associated with a higher mortality rate (Termorshuizen et al. 2014).

#### **Employment**

By the 1<sup>st</sup> of January 2015, support for clients in the mental health care and the addiction care to find work will have to be transitioned from the national government to the municipalities. The *National Platform Mental Health Care* (Landelijk Platform GGz) has investigated whether the municipalities are prepared for their task to support clients to find and maintain employment (De Wael and Lucassen 2014).<sup>43</sup> A total of 24 municipalities were investigated and 876 clients with psychological vulnerabilities were interviewed.

<sup>&</sup>lt;sup>39</sup>http://www.trimbos.nl/~/media/Nieuws%20en%20Persberichten/AF1325\_Monitor%20Plan%20van%20AanpakD igitaal.ashx.

<sup>&</sup>lt;sup>40</sup>http://www.binnenlandsbestuur.nl/bestuur-en-organisatie/nieuws/ambtenaren-vrezen-chaos-bijdecentralisaties.9447053.lynkx.

<sup>&</sup>lt;sup>41</sup>http://eurpub.oxfordjournals.org/content/early/2014/09/15/eurpub.cku155.

<sup>&</sup>lt;sup>42</sup>http://isp.sagepub.com/content/60/5/426.abstract.

<sup>&</sup>lt;sup>43</sup>http://www.platformggz.nl/lpggz/download/open-voor-werk-overige-stukken/factsheet-landelijke-tussenrapportage-open-voor-werk.pdf.

Unfortunately, it was found that the municipalities have no overview of their target group, and that the responsible civil servants still lack appropriate expertise. Fortunately, 69% of the respondents were positive about their case manager, but although 58% of the respondents would appreciate the support of a paraprofessional, only 35% did receive such support.

## Recovery in general

The *Journal Addiction* (Tijdschrift Verslaving) is the official journal in the Netherlands that informs professionals about the latest developments in the epidemiology, prevention, and treatment of addictions. In December 2013, a special issue of the Journal Addiction was devoted to recovery. <sup>44</sup> Stollenga (2013) <sup>45</sup> introduces the special issue with the observation that the revival of the recovery approach fits in very well with the general current transition in society. The societal transition will affect the relationships between citizens and the government and between citizens and the institutions. Van der Stel (2013) <sup>46</sup> adds that there will be "a shifting paradigm in which the role of customer experience and expertise is important", which raises the question "whether existing protocols, guidelines and manuals are consistent with new ideas about recovery". Adjustments will be needed.

The *Skuul organisation* was one of the first institutes in the Netherlands to adopt the recovery approach. Ever since 1978, "professionals in the Skuul organisation on the Dutch isle of Texel have been working according the recovery concept". "Clients have control; developing manners to deal with their problems; whether or not using their existing social networks or minimal professional support" (Stollenga et al. 2013).<sup>47</sup> Another salient example of the promises of the recovery approach is given by Vander Laenen et al. (2013).<sup>48</sup> Based on interviews with 40 former drug using offenders, these authors demonstrate that "desistance is subordinate to recovery because of the fact that drug using offenders especially see themselves as drug users and not as criminals". As a result of this self-image, the former offenders "were convinced that recovery from drug use would lead them to a stop in their offending". However, an analysis of four recovery projects in the addiction care still reveals that "the visibility of the projects in their organizations and their 'ideological' impact was limited", which "underlines the need for upholding beneficial conditions in order to continue and develop recovery oriented projects" (Barendregt and Wits 2013).<sup>49</sup>

<sup>44</sup>http://link.springer.com/journal/12501/9/4/page/1.

<sup>&</sup>lt;sup>45</sup>http://download.springer.com/static/pdf/343/art%253A10.1007%252Fs12501-013-0031-x.pdf?auth66=1408625964\_c3f6f896decbd83defa137e1939864b6&ext=.pdf.

<sup>&</sup>lt;sup>46</sup>http://download.springer.com/static/pdf/241/art%253A10.1007%252Fs12501-013-0032-9.pdf?auth66=1408628047\_510bc07388e9e265ccd3aad10da21c29&ext=.pdf.

<sup>&</sup>lt;sup>47</sup>http://download.springer.com/static/pdf/1/art%253A10.1007%252Fs12501-013-0038-3.pdf?auth66=1408710800\_4b0e98d06e5765275020984ffcf886be&ext=.pdf.

<sup>&</sup>lt;sup>48</sup>http://download.springer.com/static/pdf/201/art%253A10.1007%252Fs12501-013-0033-8.pdf?auth66=1408630069\_d95b725220b2dd9b28576b9340617aac&ext=.pdf.

<sup>&</sup>lt;sup>49</sup>http://download.springer.com/static/pdf/121/art%253A10.1007%252Fs12501-013-0035-6.pdf?auth66=1408706890\_edc7f5b1ef703c5d8d94ca9001826318&ext=.pdf.

# 9 Drug related crime, its prevention, and prison

# 9.1 Drug related crime

# 9.1.1 Drug law offences

The most important act with regard to drug law offences is the Opium Act, which defines the trafficking, production, cultivation, dealing and possession of illegal drugs as criminal acts, when these activities take place outside of the conditions mentioned in the Opium Act Decision and the Regulation Opium Act Exemptions. Preparative or facilitating activities for the illegal production, sale or export of hard drugs are also criminal acts according to the Opium Act (article 10a). A proposal for an article that defines preparative or facilitating activities for cannabis production as a criminal act was accepted by the Lower House in 2013 and is in 2013 under discussion in the Upper House (T.K. Handelingen 2012-2013, 69-15, 2013; E.K. 32 842-J, 2014).

The Prevention of Abuse of Chemicals Act is also of importance for the combat of drug-related crime, especially with regard to precursors of synthetic drugs. In addition, administrative approaches play an increasing role in the combat of drug-related crime and nuisance on the local and regional level.

Paragraph 9.1.1 reports about Opium Act offences. Data are presented from registrations of Police Forces, the Public Prosecutor and the Custodial Institutions Agency. With regard to these registration data the following should be noted:

- The figures cover offences that came to notice of the police. They should not be interpreted as a supply indicator or an indicator for the success of supply reduction efforts.
- Registration data always depend also on the activities, priorities and skills of law
  enforcement agencies. In the observed period (2013) there were several intensified law
  enforcement activities running with regards to Opium Act offences. The production and/or
  import and export of cocaine, heroin, synthetic drugs and the cannabis cultivation are
  priority areas in the combat of undermining organized crime since 2008 (T.K. 2012-1013,
  29 911, nr. 79). These enforcement priorities influence the numbers of reported offences.
- Databases are adapted and improved in the course of time and figures are cleaned and adapted every year. The most recent (preliminary) updates over 2013 are presented here.
- The national registration systems of police and Public Prosecution do not contain specific information about types of drugs or specific types of drug offences. Only 'hard drugs' (schedule I) and 'soft drugs' (schedule II) can be distinguished. This general distinction between hard and soft drugs will be made in this chapter. In addition, we will present data of a study (commissioned by WODC) into the police files which goes more in-depth and specifies offences as well as drugs (Kruize & Gruter, 2014).

Since 2008, the jurisdiction of the Public Prosecutor to apply sanctions were expanded (Stc 8299, 2012).<sup>50</sup> The data in the next paragraphs include the facts which were handled by the Public Prosecutor on the basis of this expanded jurisdiction.

Opium Act reports by the Police Forces and Military Police (table 9.1.1)

- The total number of police reports of Opium Act offences decreased slightly in 2013 compared to 2011 and 2012. The number is about 18 thousand in 2013.
- The decrease concerns mainly hard drugs. The number of soft drugs related offences was in 2013 (8,966) comparable with 2012 (8,985). Combined hard and soft drugs cases constitute a minority of all drug related cases
- The percentage of hard drugs related reports decreased over time while the numer of soft drugs related reports increased and now outnumber the former. This was already the case in 2011 and 2012. In 2010 there was a 'break even' point. Before 2011, there were more hard drugs than soft drugs reports. The increase is probably a result of the intensified enforcement efforts directed at cannabis production. It might also be related to the increased focus of the police on soft drugs dealing outside coffee shops within the framework of the tightened coffee shop policy (Van Ooyen et al., 2013; 2014).
- In 2013, 8.3% of all the police reports concerned Opium Act offences. The percentage of Opium Act reports increased in recent years, which is in contrast to the decreasing trend of the total number of police reports. The increase is mainly caused by the increase of the number of soft drug reports.
- Most arrestees for Opium Act offences are male. Most of the arrestees have more than
  one criminal report in their total criminal past. For 42%, the 2013 offence was the first
  registered offence (of all possible offences, not only Opium Act offences; not in table).

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<sup>&</sup>lt;sup>50</sup> Since February 2008, the Public Prosecutor has the disposal to impose sentences for several crime types with a high prevalence without referring to the Court. This is the so called "strafbeschikking" (disposal to impose sentences) and it may imply several sanctions like fines, community service orders and disqualification from driving. This disposal is gradually being implemented. It is meant to replace the transaction entirely in a couple of years. In 2011 the first "strafbeschikkingen" in relation to Opium Act offences can be found (2% then).

Table 9.1.1: Opium Act reports by the Police by drug type (hard-soft), 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013 <sup>II</sup>
Hard drugs	11,084	10,978	10,682	9,524	7,774	7,799	7,946	8,218	7,610
Soft drugs	8,274	7,973	7,862	7,560	8,176	7,705	8,368	8,985	8,966
Hard and soft	2,157	2,708	2,800	2,717	1,916	1,468	1,563	1,612	1,683
Other/unknown	380	349	93	57	21	10	17	36	9
Total	21,895	22,008	21,437	19,858	17,887	16,982	17,894	18,851	18,268
Hard drugs	51%	50%	50%	48%	43%	46%	44%	44%	42%
Soft drugs	38%	36%	37%	38%	46%	45%	47%	48%	49%
Hard and soft	10%	12%	13%	14%	11%	9%	9%	9%	9%
Other/unknown <sup>III</sup>	2%	2%	0%	0%	0%	0%	0%	0%	0%
Total <sup>l</sup>	100%	100%	100%	100%	100%	100%	100%	100%	100%
% drug related of total number of offences	7.3%	7.3%	6.9%	6.8%	6.6%	6.7%	7.0%	7.6%	8.3%

I. More than one offence may be reported per suspect. Due to rounding errors, percentages do not always add up to 100. II. Numbers for 2013 are preliminary. III. 0% is <0,5%. Source: HKS, KLPD/IPOL, extraction from the WODC-Datamart Drugs, 2014.

# Opium Act cases registered by the Public Prosecutor (table 9.1.2)

The next phase in the criminal justice chain is the Public Prosecutor. Note that a police report is a different administrative unit than a case registration of the Public Prosecutor.

- The number of Opium Act cases registered by the Public Prosecutor decreased in 2013 with 6% to a total number of about 17 thousand. The increasing trend between 2010 and 2012 stopped. It was particularly the number of soft drug cases which decreased.
- Soft drugs cases (53%) outnumbered the hard drugs cases (43%). In the longer term there seems a decrease in hard drug cases and an increase in soft drug cases.
- In 2013, 8.2% of all cases concerned Opium Act cases. The percentage of Opium Act cases increased since 2007.

Table 9.1.2: Opium Act cases registered by the Public Prosecutor by drug type (hard-soft), 2005-2013<sup>l</sup>

	2005	2006	2007	2008	2009	2010	2011	2012	2013 <sup>II</sup>
Hard drugs	9,921	9,902	9,463	9,082	7,429	6,899	7,387	7,591	7,300
Soft drugs	9,500	9,544	9,206	9,058	8,969	7,380	9,326	9,890	9,093
Hard and soft	720	833	686	674	651	593	671	682	647
Other/unknown	59	34	53	53	40	58	36	37	90
Total	20,20	20,31	19,408	18,867	17,089	14,930	17,420	18,200	17,130
Hard drugs	49%	49%	49%	48%	44%	46%	42%	42%	43%
Soft drugs	47%	47%	47%	48%	53%	49%	54%	54%	53%
Hard and soft	4%	4%	4%	4%	4%	4%	4%	4%	4%
Other/unknown <sup>II</sup>	0%	0%	0%	0%	0%	0%	0%	0%	1%
Total <sup>l</sup>	100%	100%	100%	100%	100%	100%	100%	100%	100%
% drug related of total number of cases	7.5%	7.5%	7.1%	7.1%	7.3%	7.0%	7.5%	8.0%	8,2%

I. More than one case may be recorded per suspect; due to rounding errors, percentages do not always add up to 100. II. Numbers for 2013 are preliminary. III. 0% is <0,5%. Source: OMDATA, extraction from the WODC Datamart Drugs, 2014.

Decisions made by Public Prosecutor in Opium Act cases (table 9.1.3)

- The majority of Opium Act cases is submitted to court. In 2013, this was 57% of the cases. This is 1 percent less than in 2012 and lower than in the years before 2012.
- The decrease of the percentage of cases submitted to court seems to be caused by the rise of the so called "strafbeschikking" (disposal to impose sentences)<sup>51</sup> in 2012 and 2013 and the increase of the number of case dismissals in 2013 (also already in 2012).
- In 10% of the cases the Public Prosecutor imposed a sentence in 2013.
- Transactions were applied in 12% of the cases in 2013. This is gradually decreasing. The main part of the transactions by the Public Prosecutor concerned financial transactions. There were 1,500 in 2013 (2,200 in 2012). The median amount of money involved was 250 euros in 2013, 20 euros less than in 2012.
- Case dismissals increased in 2013, especially the dismissals for technical reasons. The other cases ended with joinder of charges (1% in 2013), were dismissed for

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<sup>&</sup>lt;sup>51</sup> See note 50.

administrative reasons or transferred to another court (the last two types are not in the table).

Table 9.1.3: Decisions by the Public Prosecution in Opium Act cases, 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Submitted to court	65%	66%	66%	62%	62%	67%	65%	58%	57%
Transaction	19%	21%	22%	24%	24%	21%	18%	16%	12%
Sentence by Public Prosecutor <sup>I</sup>							2%	5%	10%
Case dismissal due to policy reasons	8%	6%	5%	6%	6%	5%	6%	9%	9%
Case dismissal due to technical reasons	6%	5%	5%	6%	7%	7%	9%	10%	11%
Joinder of charges	2%	2%	2%	2%	2%	1%	1%	1%	1%

I.Only possible since 2011. Source: OMDATA, extraction from the WODC Datamart Drugs, 2014.

# Decisions made by Public Prosecutor in hard and soft drug cases (not in table)

- The percentage of hard drugs cases submitted to court in 2013 was 58%. This was higher than that for soft drugs cases (54% in 2013). The highest percentage of submissions to court applied to cases with combinations of hard and soft drugs (80% in 2013).
- The percentage of transactions was higher in soft drug cases than in hard drug cases in 2013 but only slightly: 13% versus 12%.
- Sentences imposed by the Public Prosecutor concerned 13% of the hard drug cases, 9% of the soft drug cases, and 7% of the cases with hard and soft drugs combined.
- Dismissal of cases occurred in 10% of the soft drug cases, in 8% of the hard drug cases and in 6% of the cases with hard and soft drugs combined.

#### Court sentences in Opium Act cases (table 9.1.4 and figure 9.1.1)

- In 2013 the number of court sentences in Opium Act cases was almost 9,800. When compared to 2012, there was an increase of hard drug cases as well as of soft drug cases.
- The decreasing trend in the number of hard drug cases stopped in 2013.
- In 2013, 50% of the court cases concerned a soft drug case, 45% a hard drug case and only 5% cases with hard and soft drugs combined. There are no substantial changes in these percentages compared to 2012.
- In 2013, Opium Act cases constituted 8.8% of the total number of cases sentenced by the courts. This percentage increased each year since 2009. The increase could be caused by the fact that in Opium Act cases the Public Prosecutor does not apply own sentences so

much (although this is increasing and applied to 10% of the cases in 2013). Instead, most cases are submitted to court by the Public Prosecutor.

Table 9.1.4: Number of court sentences for Opium Act cases by drug type, 2005-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013
No of Opium Act cases	12,287	13,103	11,927	11,499	10,595	9,428	9,118	9,385	9,766
Type of drug:									
- Hard drugs	52%	50%	51%	51%	48%	47%	48%	44%	45%
- Soft drugs	43%	45%	45%	45%	47%	48%	47%	51%	50%
- Hard- and softdrugs	5%	5%	5%	4%	5%	5%	5%	5%	5%
- Other/unknown <sup>II</sup>	0%	0%	0%	0%	0%	0%	0%	0%	0%
% drug related on total number of cases	8.4%	8.9%	8.5%	8.1%	7.6%	7.8%	7.8%	8.5%	8.8%

I. There can be more than one case per person. II. 0% = (0.5%) in cases where the number of other/unknown is (0.5%)0. Source: OMDATA, extraction from the WODC Datamart Drugs, 2014.

Opium Act cases which are sentenced by a court result in first instance in a conviction with a community service order, a (partly) unconditional prison sentence or a fine.

- In 2013 the community service orders applied by the courts outnumbered the unconditional prison sentences: there were more than 3,600 community service orders and about 3,300 unconditional prison sentences.
- Prison sentences were applied more often in hard drugs cases, while community service orders were applied more in soft drugs cases.
- The mean number of hours of a community service order was 91 hours in 2013, similar to 2012.
- The mean number of days of (partly) unconditional prison sentences was 247 days in 2013 (this was 260 days in 2012). The mean number of days shows a decreasing trend.
- In 2013 the courts applied about 940 fines, slightly less than in 2012 when there were 1,000 fines. The median fine in 2013 was €490, €10 less than in 2012 (not in table).

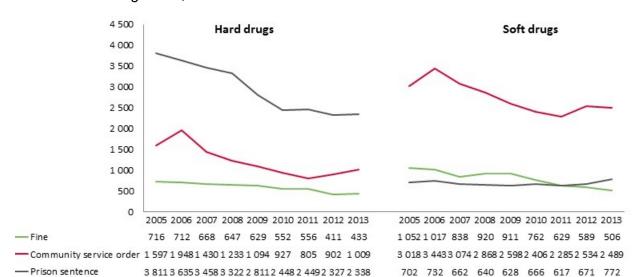


Figure 9.1.1 Type of sanctions in Opium Act cases imposed by the Courts, hard and soft drug cases, 2001-2013<sup>I</sup>

I. There can be combinations of sanctions. Source: OMDATA, extraction from the WODC Datamart Drugs, 2014.

Opium Act offenders in prisons (table 9.1.5 and figure 9.1.2)

Of the total prison population (10, 544 detainees) on September 30, 2013, 17% (1,600) were convicted for an Opium Act offence. This percentage is the same as in 2012. In the longer term both the number and percentage of Opium Act detinees decreased.

Table 9.1.5 Size of the population of criminal justice detainees and Opium Act detainees (numbers and %), 2006-2013, reference date 30 September

	2006	2007	2008	2009	2010	2011	2012	2013
Prison population total	13 718	12 769	11 934	11 682	11 736	11 545	11 160	10 544
Opium Act	2 574	2 576	2 368	2 249	2 107	1 855	1 666	1 600
% Opium Act <sup>I</sup>	19%	20%	20%	22%	20%	18%	17%	17%

I. Percentages without category 'unknown'. Source: Kalidien & Van Rosmalen, 2014.

Most detainees in the Dutch prisons are convicted for violent offences, which include violent offences, property offences with violence and sexual offences. Opium Act offences are fourth in the ranking of types of offences.

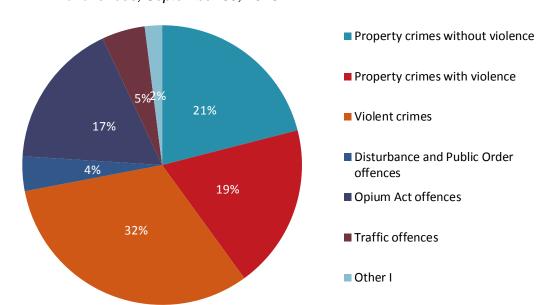


Figure 9.1.2: Percentage of detainees for Opium Act offences compared to other categories of offences, September 30, 2013

I. Other: unknown because of specific legal residency or other reasons. Source: Kalidien & Van Rosmalen, 2014.

#### Criminal recidivism of Opium Act offenders

The Recidivism Monitor of the WODC contains data of all offenders who were convicted from 1997 on (see Wartna et al., 2011). When they get in contact again with the Public Prosecutor, this counts as criminal recidivism. Data are corrected for time in detention (time at risk). For Opium Act offenders who were convicted between 1997 and 2010, the recidivism (in mean over 10 year cohorts) with a new Opium Act offence was computed.

- After one year 7% committed another Opium Act offence, after 10 years this amounts to 28%. Compared to other categories of offenders, this is low to medium.
- The recidivism in general is decreasing, not only for Opium Act offenders but also for other categories of offenders.
- 8% of those who committed a hard drug offence had committed another hard drug offence within 1 year, after 10 years this increased to 27%.
- For soft drug offenders, the 1-year soft drug recidivism was 4% and 21% after 10 years.
- 22% of the Opium Act offenders committed any other offence (not specified) after one
  year, 56% did so after 10 years. 16% committed a serious crime after one year, 46% did
  so after 10 years. The recidivism with any offence and with serious offences is higher
  among hard drug offenders than among to soft drug offenders. This implies that hard drug
  offenders are involved with more crime and with more serious crime than soft drug
  offenders.

# 9.1.2 Other drug-related crime (i.e. crimes committed by drug users)

#### Offences committed by drug users

The Police Records System includes a classification 'drug user'. This designation is given to a suspect if he/she may constitute a danger to others due to his or her drug use, and/or if he/she indicates being a drug user and/or if he/she asks for methadone. The classification is made by the police, but because drug use is not assessed systematically, its validity is questionable. An unknown proportion of drug using offenders is missing in the classification. Drug users who are registered as such by the police had the following profile in 2013 (not in table; preliminary data):

- The population is mostly male (91%) and ageing: the mean age increased from 37 years in 2003 to 43 in 2013. A large majority (97%) was over 24 years old in 2013.
- Many of them are frequent offenders: 84% was arrested more than ten times and 26% more than 50 times.

The profile did not change much compared to 2012. The total number of arrestees that was classified as a drug user by the police decreased (again) in 2013. There is a clear decreasing trend in the longer term: in 2005, more than 9,646 arrestees were classified as a drug user, in 2013 5,265.

With regard to the type of crime, we can see the following pattern in the registered crime (table 9.1.6):

- Most of the drug using suspects are suspected of property crimes. Their percentage increased from 54% in 2012 to 57% in 2013.
- 8% of the drug users was suspected of property crimes with violence or extortion in 2013, which is slightly higher than in 2012.
- Violent crimes (against persons) committed by drug using suspects remained more or less constant: 29% in 2012, 28% in 2013. This percentage is more or less stable since 2008.
- Opium Act offences are decreasing since 2006. In 2013 the percentage was 14%.
- Vandalism/disturbance of public order and traffic offences also decreased in the last years. In 2013, the proportions were 19% and 9%, respectively.
- Sexual offences occur rarely and their percentage is constant (1%).
- 'Other offences' decreased somewhat in 2013. These offences concern the Weapons and Munition Act and economic or environmental offences.

Table 9.1.6: Types of crime of suspects classified by the Police as drug users, 2005-2013

	2005 N= 9,646	2006 N= 8,878	2007 N= 8,307	2008 N= 7,757	2009 N= 6,892	2010 N= 6,324	2011 N= 6,199	2012 N= 5,533	2013 N= 5,265
Property crimes without violence	53%	50%	49%	51%	50%	52%	54%	54%	57%
Property crimes with violence/extortion	8%	8%	8%	7%	7%	7%	6%	7%	8%
Other violence (against persons)	24%	26%	29%	28%	29%	29%	29%	29%	28%
Opium Act offence	24%	25%	21%	21%	19%	16%	16%	16%	14%
Vandalism, disturbance of public order	22%	23%	24%	22%	20%	20%	20%	20%	19%
Traffic offence	11%	11%	12%	13%	13%	11%	12%	11%	9%
Sexual offence	1%	1%	1%	1%	1%	1%	1%	1%	1%
Other	11%	10%	11%	10%	11%	11%	12%	14%	11%

I. Percentages do not sum to 100 because suspects may commit more than one type of offence. Source: HKS, KLPD/DNRI, extraction from the WODC Datamart Drugs, 2014.

Dorn et al. (2014) conducted a study into (mental) health problems and use of medication among 3,232 arrestees in police arrest in Amsterdam who were visited by the Amsterdam Forensic Medical Services between July 2008 and June 2009. They compared the results with those of 78,975 regular patients in a general practice – matched on age and gender. The health problems were coded according to the International Classification for Primary Care (ICPC) and the medication according to the Anatomical Therapeutic Chemical (ATC). A visit by the Medical Services is no standard procedure, but will be carried out when requested by the arrestee or the police, in case of health problems – like the use of drugs or medication.

- There were 7,888 visits and 3,232 arrestees were visited (28% of the total number of arrestees).
- 50% of the arrestees had a diagnosis of mental health problems.
- In 54% of the cases, problematic drug abuse is the main reason for the visit. Problematic alcohol abuse was the reason in 20% of the cases.
- The problems among the arrestees are significantly worse than those among the regular patients, indicating that arrestees need qualified medical care while in the police setting.

# Driving offences by drug users

Houwing and Hagenzieker (2013) report results of the European DRUID-project (Driving under the Influence of Drugs, Alcohol and Medicines). Their findings concern the period 2007-2009.

- 2.2% of the Dutch drivers was tested positive for drug use while driving. This is above the European mean of 1.9%.
- Cannabis has the highest prevalence (1.7% of the drivers). This is also above the European mean of 1.3%.
- Cocaine is the second most prevalent drug. 0.3% of the drivers tested positive for cocaine. This is under the European average of 0.4%.
- Amphetamines and ecstasy were used by 0.2% of the drivers, which is above the European average.
- Opiate use is rare among drivers, in Europe as well as in the Netherlands.
- In cases where combinations of drugs are used, it concerns mostly cocaine-cannabisalcohol or cocaine-alcohol. Combinations of illegal drugs with soporifics or tranquilizers also occur.

#### Drug-related nuisance

With regard to drug-related nuisance there is information from the annual Integral Security Monitor (CBS 2014). This is a victimization survey based on self-report by Dutch inhabitants of 15 years and older who live in a private household situation among others about victimization and feelings of security in the last 12 months. Respondents filled out questionnaires – via internet, on paper, by telephone or face-to-face. The latest survey used questions that differ from those in former reports, which hinders a comparison between 2012/2013 and the years before. Drug and alcohol related nuisance are categorized under "social nuisance". Drug related nuisance contains "drug use or drug dealing, for instance in streets or in coffee shops". Public drunkenness, defined as "drunk persons in the street" is also a category.

- 24% reported that drug use of drug dealing occurred occasionally in their neighbourhood in 2013. This proportion is the same as in 2012.
- There is a strong correlation between the experience of drug use and drug dealing in the neighbourhood and feelings of insecurity in that neighbourhood.
- 4% experienced a lot of nuisance from this themselves. This is also the same as in 2012.

Other information about drug-related nuisance comes from an evaluation study into the consequences of the stricter coffee shop rules in 2012 and 2013<sup>52</sup> (Van Ooyen-Houben, Bieleman & Korf, 2013; 2014). Snippe and Bieleman (2013; 2014) conducted a survey among residents in the direct vicinity of a coffee shop (within 100 metres – half of the group even within 50 metres) and asked them whether they experience nuisance from the coffee shops and if so, to specify the kind of nuisance. The survey took place in 14 coffee shop areas in 14 municipalities in the Netherlands, dispersed over the country. 32 coffee shops were involved. There were 3 assessments, the first in March-April 2012 (n=712, response

 $<sup>^{52}</sup>$  The Private Club and the Resident criteria, see Chapter 1.

rate 63%), the second in October-November 2012 (n=714; response rate 59%) and the third in October-November 2013 (n=714; response rate 66%).

A difference was made between municipalities in the south of the country (which were first confronted with the new rules and which were confronted with more rules) and municipalities in the other provinces.

- In March-April 2012 34% (in the other provinces) to 40% (in the south) of the residents experienced nuisances.
- Later, in October-November 2012, 35% (other provinces) to 44% (south) experienced nuisances. A year later, in October-November 2013, this was the case for 45% (other provinces) to 54% (south).
- After the introduction of the stricter rules for coffee shops, the residents in the south experienced less nuisance which they attributed to coffee shops and/or 'drug tourism'. But they experience more nuisance from dealing on the streets.
- After the Private Club criterion was abolished and the Resident criterion was changed to local tailoring, the nuisance from dealing activities was reduced, but the nuisance from coffee shops increased somewhat.

# 9.2 Prevention of drug related crime

# 9.2.1 Prevention of drug law offences

#### Priorities in law enforcement

- The organized crime in relation to cocaine, heroin, synthetic drugs and the large-scale professional cannabis cultivation has been defined as priority areas for the Dutch police for the period 2013-2017 (TK 29 911-79 and 84, 2013).
- The efforts were intensified (TK Aanhangsel 2014-2015-408; TK 32842, H, I, J, 2014; TK 29911-93, 2014).
- Dedicated police capacity (125 persons) was brought together in special teams which
  operate in the South of the country where the problems are most urgent. Among the (in
  total three) priority areas are cannabis cultivation and synthetic drug production. These
  'undermining teams' focus primarily on short-term and direct interventions ('short hits') in
  combination with confiscation of criminal proceeds.
- At the same time, police and Public Prosecutor aim at an increase of further investigations into organized crime networks in relation to (a.o.) cocaine, heroin, synthetic drugs and large-scale cannabis cultivation and trafficking (TK 29911-79, 2013; TK 24077-321, 2014; TK 32842, H, blg -374712, 2014).

# Strategies in law enforcement

Core elements of the strategy are: working according to the 'barrier model' (attacking crucial points in the modus operandi of the networks, e.g. facilitators); working with multidisciplinary integrated approaches; and confiscations of criminal proceeds (TK 29911-79, 84, 86, 94, 2013; 2014; Jaarverslag 2013, 2014). The Minister of Security and

- Justice announced in 2013 to increase infiltration in criminal networks by citizens and deployment of crown witnesses under strict conditions (TK 29911-83, 2013).
- A central aspect in the combat is the co-operation of local and regional institutions like the public administration, police, Public Prosecutor, Fiscal investigation units and Tax Authorities and this approach will be continued (TK 29911-84). A combination of administrative and criminal laws is applied. Co-operation between administrative and judicial partners is enhanced and supported by so-called Regional Information and Expertise Centres (*RIEC-networks*). RIECs are supported by a national Centre of Information and Expertise (*LIEC*), which is a shared service centre for RIECs. Organised cannabis cultivation is one of the main priority areas of the *RIECs*. Almost all (98%) municipalities participated in a RIEC in 2013.
- A central element in the approach against organised crime is the confiscation of criminal proceeds (TK 29911-79, 2013).
- The Public Prosecutor and the national police started 52 large-scale project-based investigations into undermining organised crime organisations who were involved in cocaine, heroin, synthetic drugs or cannabis in 2013 and finished 60 investigations (E.K. 32842-H, blg 374712, Verantwoording aanpak georganiseerde criminaliteit, 2014). This total number is somewhat less than in 2012 (when it were 68 and 51 resp.). 43 times a prison sentence was applied by the court in first instance in the cases that were investigated.
- In addition, the regional Public Prosecutors and the regional police forces started 191
  project-based investigations into drug related crime, which is more than in 2012. Smaller
  regular investigations and short-blow ('korte klap') interventions were also carried out: 42
  in 2013. 106 prison sentences followed these investigations and interventions into drugrelated crime.
- The Public Prosecutor reported an increase of the investigations into drug related organized crime networks in 2013 (TK 32842, H, blg -374712, Verantwoording, 2014). Especially large-scale cannabis cultivation was increasingly the subject of investigations. The number of suspects and the number of imprisonments, however, did not increase. This might be due to the changing character of the networks, the implementation of (also) other approaches than the criminal one, and the fact that the capacity for prosecution did not increase at the same rate (TK 32842, H, blg -374712, 2014).
- The Dutch police and Public Prosecutor also participate in international Joint Investigation Teams and, with regard to synthetic drugs, in the European Empact project (TK 29911-91, 2014).
- The approach toward synthetic drugs focusses on (new forms of) precursors, like APAAN and safrole/PMK. There was also a lot of attention for GBL, the precursor for GHB. Trends that are reported are the increase of laboratories and dumpings, internationalization and professionalization (Verantwoording, 2014). The use of new precursor chemicals is also reported (Jaarverslag 2013, 2014). A special team for dumpings was installed in 2013.
- The Integrity Screening of persons who apply for a license from public authorities is an
  important tool for local authorities in their combat of organised crime (*Public*Administration Probity Screening Act, Wet Bibob). The screening determines whether
  there is a serious danger that a license or authorization will be misused for criminal
  activities. This tool is among others applied to coffee shops and smart- or growshops.

Bibob started 10 years ago and was broadened in its options in 2013 (Landelijk Bureau Bibob, 2014). The ministry of Security and Justice ordered a national screening of coffee shops on the basis of Bibob. Mayors were asked to pre-select coffee shops where criminal activities might take place, but municipalities are not obliged to co-operate. The special screenings of coffee shops started in 2011 and will last until 2014. In 2013, 71 coffee shop screenings were carried out, in 2013, there were 39. Coffee shops are the largest category in the Bibob-advices in 2013.

• The implementation of the Bibob law is complex; the national Bibob Bureau has a help desk for public government organisations that want to apply the law. These organisations get also support from their regional RIECs (see above).

# Future developments relevant for law enforcement

- The government plans to place cannabis with a THC potency of 15% or more on Schedule I of the Opium Act. This will have implications for law enforcement. See also Chapter 1.
- If acts which are facilitative or preparatory for cannabis cultivation will be defined as criminal acts in the Opium Act, this will have an impact on law enforcement. See also Chapter 1.

# 9.2.2 Prevention of crimes committed by drug users

- A change in the Code of Criminal Procedure is in preparation which will make it possible
  for the police to test the use of alcohol and drugs amongst suspects of violent crimes. For
  more information see Chapter 1.
- Since 2004, the Act 'Placement in an Institution for Habitual Offenders (Plaatsing in een inrichting voor stelselmatige daders ISD)' can be applied by the Judge in cases of habitual offending (Stb 2004-351). ISD is an alternative for standard imprisonment. A habitual offender can be confined to ISD for at most two years. The primary objective of the ISD is to reduce the public nuisance caused by extremely persistent offenders. Another objective is to reduce recidivism by offering treatment and rehabilitation.

# 9.3 Interventions in the criminal justice system

Only addiction probation services and some behavioural interventions are targeted to the specific group of addicted offenders. The other interventions in the criminal justice system are not exclusively for drug users or addicts; they have broader target groups and aim at offenders with 'criminogenic' problems that can affect their rehabilitation and their criminal recidivism. Addicts are a relevant target group for the last category of interventions, but also offenders with mental health problems or mild learning disabilities. We will describe the interventions for the category of offenders with criminogenic problems (which include drug abuse and addiction).

The following interventions are available:

- "Safety Houses" (see § 9.3.1).
- Forensic care and Penitentiary Psychiatric Centres (see § 9.3.2).

- Addiction probation services (see § 9.3.3).
- Behavioural interventions inside and outside prison (see § 9.3.4)
- The Measure of Placement in an Institution for habitual offenders (see § 9.3.5).

# 9.3.1 Safety Houses

Safety houses are networks of local organisations working together to reduce crime. Offenders are discussed in case meetings. Adequate trajectories are planned. This is an approach for all offenders, but (high) frequent offenders (amongst whom there are a lot of addicts) and offenders with addiction problems are a relevant target group. Per 1 January 2013, the Safety Houses came under the management and control of municipalities (instead of the national government). A national framework was developed to promote harmonisation of working procedures (Veiligheidshuizen, 2013).

- The number of Safety Houses is being reduced. In each of the 25 'Safety regions' there will be one Safety House.
- In February 2013, there were still 38 Safety Houses, in May 2014 there were only 33 left (www.ccv.nl). In 2012 there were still 40.

#### 9.3.2 Forensic Care and Penitentiary Psychiatric Centres

The planned Forensic Care Act (Wet forensische zorg) is a broad Act which provides a framework for an adequate connection between care and cure agencies and the justice system. The Act is approved in the House of Representatives and is now (November 2014) discussed in the Senate (EK 32398 I, J, 2014).

- Offenders can be referred to residential clinical care, outpatient care, or sheltered housing facilities outside the prison system. They can get care, cure or support.
- Places in care facilities outside prison are purchased by the Ministry of Security and Justice and are reimbursed on the basis of performance.
- In 2012, 115 care facilities were contracted, more than in the years before (Van Gemmert and Van Schijndel, 2013).

For more information see Chapter 1.

#### 9.3.3 Drug policy in prison

In the prison system in general, more attention has to be given to addiction problems among detainees, according to a recent Letter of the Secretary of State to the Parliament (TK 24587-607). Knowledge about addiction and case-finding in combination with cooperation with addiction care organizations and addiction probation services should be improved. All prison locations are expected to conceive plans for these improvements by 1 February 2015. The drug prevention policy still is in force, including cell inspections, examinations, the use of 'drug dogs' and urine controls. Possession of drugs is sanctioned on the basis of a national, uniform and standardized guideline.

#### 9.3.4 Addiction Probation Services

On 31 December 2013, the Addiction Probation Services had 21,062 registered clients, more than in 2012, when there were 17,752, and also more than in 2011, when there were 20,234 (www.svg.nl).

- Mean age is 36.5 years.
- The majority is male (92.5%), like in 2012, and born in the Netherlands (74.2%).
- 69.5% does not have a stable job.
- Most clients (also) use drugs (87.1% in 2013). Mostly it concerns the use of hard drugs (72.5% in 2013). 31.8% uses alcohol as well as drugs.
- In 14.8% of the cases there is an indication of intellectual disabilities.

The 'products' of Addiction Probation Services in 2013 are shown in table 9.3.1. Products consist of combinations of different activities and interventions. Not all figures are comparable over the years, due to changes in definitions and criteria for registration. Only 2010-2013 are shown in table 9.3.1, because there were significant changes in definitions since 2010. For 2010, activities based on old and new definitions were added.

- Supervision of clients and the writing of advisory reports for judicial authorities were carried out most often in 2013. This pattern is the same as in 2012.
- Advisory activities and case management in a criminal justice framework show increasing trends, working sentences a decreasing trend.
- 541 times the activity concerned a behavioural intervention. Possible interventions for offenders with addiction problems are (Erkenningscommissie Gedragsinterventies Justitie, 2013):
  - The short lifestyle training (accredited in 2009)
  - The lifestyle training (accredited in 2009)
  - Brains 4 Use for youngsters in criminal justice institutions for youngsters (accredited in 2010)
  - Stay-a-way for youngsters who got a learning sentence focussed on the motivation to decrease the use of substances (in the framework of the criminal justice system for youngsters) (accredited in 2011)
  - Alcohol and Violence (for alcohol addicted offenders; accredited in 2012).
- More than 5,900 times an offender was referred to a care facility outside prison.
- Supervision of clients was carried out more than 12,000 times.

Comparisons over the years are difficult, due to the changes in definitions and registrations.

Table 9.3.1: Types of assistance offered by addiction probation services and number of times activities within each type was carried out, 2010-2012<sup>1</sup>

Type of assistance	2010	2011	2012	2013
First visit to arrestee/prisoner in remand	2,122	2,049	1,754	1,917
Advisory reports (by order of Public Prosecutor, Judge, prison authorities, etc; including reports about the social environment)	10,522	10,722	12,226	13,766
Referral to care programs (under a judicial measure)	5,046	7,311 <sup>II</sup>	1,183 <sup>Ⅲ</sup>	5,913
Supervision of clients in the framework of a judicial decision	10,954	11,168	26,646 <sup>IV</sup>	12,687
Behavioural interventions <sup>V</sup>	686	542	634	541
Supervision of working sentences	4,888	3,510	3,087	2,742
Judicial case management <sup>VI</sup>	-	623	897	1,445

I. No figures on case level, no specification for type of drug/alcohol/gambling. II. Excluding referrals to care programmes outside the judicial framework of probation supervision. III. Excluding referrals to care programmes in the judicial framework of probation supervision. IV. This activity was defined broader in 2012 and is incomparable with 2010 and 2011. V. Including learning sentences since 2011. VI. New in 2011. Source: Foundation of Addiction Probation Services, 2014 (www.svg.nl).

A study was conducted into offenders (n=8,389) who started a programme in addiction probation services in 2008-2012 (Bakker et al., 2013).

- These clients commit less crimes in the year after the contact with addiction probation services than before the contact. The costs for society of their acquisitive crimes (this is their main category of offence) decrease.
- Among the young adults, the (small group of) opiate users show the highest rate of criminal recidivism, higher than users of cocaine, cannabis or other substances.
- Among the older clients, the cocaine users show the highest rate of criminal recidivism.

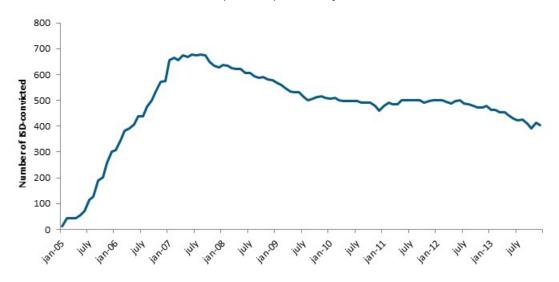
#### 9.3.5 Measure of Placement in an Institution for Habitual Offenders (ISD)

The measure of Placement in an Institution for Habitual Offenders (ISD) is a judicial measure for habitual offenders of over 18 years old. ISD can be applied for a maximum of two years. The aim of the measure is twofold: to safeguard society from the frequent offences committed by habitual offenders by incapacitation of the offenders, and to improve the individual situation of offenders, in order to reduce their recidivism.

- Tollenaar and Van der Laan (2013) report that the majority of the group of very frequent offenders in 2003-2010 has addiction problems.
- Van Zutphen, Goderie and Janssen (2014) showed on the basis of file analysis and interviews with care givers that 95% of the group in ISD (n=43) had addiction problems at the start of the ISD-measure. 4 out of 43 have an alcohol addiction, 16 a drug addiction and 21 (49%) have combined alcohol and drug addiction problems. The problems are mostly serious, as indicated by the fact that they suffer from 6 or more DSM-V symptoms.
- All ISD-clients suffer from mental health problems, ranging from schizophrenia, PTSS or psychotic symptoms (Van Zutphen et al., 2014).
- About half of the ISD-clients had low intellectual abilities (Van Zutphen et al., 2014).

- The level of education, the housing situation and the working situation were also often problematic (Van Zutphen et al., 2014).
- In 2013, there were 392 to 463 persons per month under the Measure of Placement in an Institution for Habitual Offenders (ISD). This is less than in 2012 and lower than in the period 2007-2012.
- Each month in 2013, 10 to 22 new ISD-convicted entered the ISD, a mean of 16 per month. This is less than in 2012, when 12-31 new convicted entered each month, with a mean of 20.

Figure 9.3.1: Number of offenders under the Measure of Placement in an Institution for Habitual Offenders (ISD'ers), January 2005-December 2013



Source: Custodial Institutions Agency, 2014.

- Most offenders under the ISD-measure participate in an trajectory with behavioural interventions or care programmes (table 9.3.2). Most of these trajectories take place inside prison (47%), the others outside prison (38%). A minority of offenders under the ISD-measure stays in regular prison regime (15%).
- The percentage of participants in trajectories versus regular prison regime changed slightly in 2013 compared to 2012 (16% in 2012, 15% in 2013).
- The proportion of trajectories outside prison shows an increasing trend, those inside prison a decreasing trend.
- Most ISD-convicted spend the first part of the measure inside prison and the second part outside prison (Van Zutphen et al., 2014).
- 63% of the days under the ISD-measure is spent inside prison, in regular prison regime (53%) or in the special treatment units in prison, the Penitentiary Psychiatric Centres (Penitentiair Psychiatrisch Centrum; 11%). 37% of the days is spent in a trajectory outside prison (Van Zutphen et al., 2014).

Table 9.3.2: Percentage of offenders in different regimes under the Measure of Placement in an Institution for Habitual Offenders, 2009-2012

Regime:	2009	2010	2011	2012	2013
Trajectory outside prison	24%	30%	32%	33%	38%
Trajectory inside prison	57%	55%	52%	51%	47%
Regular prison regime	19%	15%	16%	16%	15%
Total N (mean per month)	528	493	494	488	431

Source: Custodial Institutions Agency 2014.

- The effectiveness of the ISD was investigated twice (Tollenaar & Van der Laan 2012; Tollenaar, Van der Laan & Beijersbergen 2014). The researchers conducted a quasi-experimental study with offenders under the ISD-order and comparable habitualoffenders in a regular (relatively short) prison sentence. They created comparable groups with propensity score matching and measured the prevalence of criminal recidivism after ISD or prison sentence. The outcome measure was criminal recidivism, assessed on the basis of cases in the registrations of the police and the Public Presecutor.
- In the first study, 584 offenders under the ISD who were released between 2005 and 2009 were investigated. Although the recidivism of the ISD-group was very high (72%), it was less high than the recidivism of the control group with regular detention (recidivism rate between 84% and 88%) (Tollenaar and Van der Laan 2012). On the longer term after 6 years ISD is still effective: recidivism among offenders under the ISD was 84,7% and among the control group 92,7%; the difference is 8%, which is a small statistical significant effect.
- In the follow up study, 514 offenders under the ISD who were released in 2009 and 2010 were investigated. Again, the ISD measure proved to be effective: 74% of the offenders under the ISD was arrested after 2 years, in the control group 83% (Tollenaar et al. 2014). The difference is 9%. After 4 years, the criminal recidivism is 84% in the ISD-group and 90% in the control group, which is still a difference of 6%.
- The effect of ISD is small, but significant. It is above the mean effect of other judicial interventions.
- The effect is also visible in the *number* of offences after release: offenders under the ISD offended less frequent than offenders in the control groups (a mean of 3,8 criminal cases less in a year).
- In addition, there is an incapacitation effect. Whereas the ISD lasts longer than the regular prison sentence, more than 5 criminal cases and more than 8 (registered) offences were *prevented*. Most concerned theft.
- Other researchers investigated the *cost-effectiveness* of the ISD and of an eventual longer duration of the ISD (Van Zutphen, Goderie & Janssen 2014). The study was commissioned by the Research Department of the Ministry of Security and Justice. The reason for the study were suggestions of members of Parliament that a longer ISD (half a year longer or a year longer) might be beneficial (TK 29270, nr. 69, 2012). They estimate that the ISD with its present duration of 2 years is cost-effective. A prolonged duration of the ISD 2,5 or 3 years would also be cost-effective, 3 years being more cost-effective than 2,5 years. Supervision of 0,5 or 1 year by probation services after release from the ISD, which is not included in the present ISD, would be as cost-effective as a prolonged ISD (Van Zutphen et al. 2014).

## 9.4 Drug use and problem drug use in prison

There are no new data on this topic.

## 9.5 Responses to drug related health issues in prison

See also § 9.3.3.

## 9.6 Reintegration of drug users after release from prison

Aftercare – in terms of providing an identity card, housing, income and care (if necessary) and settlement of debts – is a responsibility of municipalities and penal institutions. It should be available for all (ex-)prisoners. Basic principles are:

- It is the prisoners own responsibility to re-integrate. The municipality and the Ministry of Security and Justice support the prisoner, by co-ordination of the aftercare.
- Prisoners will in principle go back to the municipality where they lived before their imprisonment.
- No prisoner must fall between two stools.

Aftercare starts already during imprisonment. The Ministry of Security and Justice started a special aftercare programme (Van Duijvenbooden and Plattje 2010). This programme runs under the direction of the Ministry, and penitentiary institutions, municipalities, probation services, mental health/addiction care organisations, housing corporations and organisations that help people to solve their debts, work together. This programme is still running in 2013.

# 10 Drug markets

It is difficult to get a valid overview of the availability and supply of drugs because of the hidden character of drug production and trafficking and the lack of unambiguous indicators.

Production of drugs in the Netherlands is often indoor (for instance cannabis cultivation or production of synthetic drugs) and not directly visible. The data in § 10.1 and § 10.2 are drawn from research reports and Crime Analyses Reports of the Netherlands Police Agency. Moreover, data on the availability of cannabis on the consumer market is provided in the framework of an evaluation of an additional criterion coffeeshops have to adhere to (the residence criterion<sup>53</sup>). Data on purity and prices of drugs at retail level (§ 10.3) are monitored by the Drugs Information and Monitoring System (DIMS).

# 10.1 Availability and supply

10.1.1 Availability

## Access to cannabis/availability of cannabis

In the Netherlands, the sale of cannabis to individual users is tolerated by the mayor and not prosecuted by the Public Prosecutor if it takes place in a coffee shop which has a formal permit of the mayor and which adheres to criteria for non-prosecution which are defined in the Opium Act Directive of the Public Prosecution Service (Aanwijzing Opiumwet, see www.om.nl).

• The number of coffee shops decreased in 2012 and 2013. At the end of 2011 there were 651 coffee shops, at the end of 2012 there were 617 and in April 2013 there were 614 coffee shops (Bieleman et al. 2013).

The Opium Act Directive of the Public Prosecutor contains criteria for non-prosecution of coffee shops (no advertising, no sale or presence of hard drugs, no nuisance, no sale or presence of youngsters under the age of 18, no transaction to customers of more than 5 grams and no more than 500 grams in stock).

- Since 2013, an additional criterion entered into force for the whole country: the residence criterion<sup>53</sup>. This criterion forbids entrance to the coffee shops for non-residents of the Netherlands (Stcrt. 2012-26938). Its actual implementation is subject to local decision making (TK 24077-293, 309, 310, 2012; 2013).
- An evaluation study in 15 municipalities showed that most municipalities did include the
  residence criterion in their local policy, but decided not to enforce it actively in practice.
   Some did not include it in their policy. Others do enforce it in practice, but the intensity of

<sup>&</sup>lt;sup>53</sup> Two criteria (the Residence and Private Club criterion) were enforced since 1 May 2012 only in the three southern provinces and were planned to be broadened to the rest of the country per 1 January 2013. Per 1 January 2013, the number of members would be limited to 2,000 per coffee shop. In November 2012, the Private club criterion was abolished by the new government (T.K. 24077-293). It was removed from the Opium Act Directive per 1 January 2013, including the foreseen maximum of 2,000 members.

- enforcement varies a lot. Most of them take a lenient approach and permit exceptions to a limited extent (Van Ooyen & Van der Giessen, 2014).
- Active enforcement mainly is implemented in the South of the country. Municipalities that
  do not enforce actively say that they do not suffer from nuisance related to coffee shop
  tourism, that they are uncertain about the legal validity of the criterion, and that
  enforcement would cost them police capacity, while the nuisance was limited (Van Ooyen
  and Van der Giessen, 2014).
- The uncertainty was resolved in June 2014, when the Council of State judged that the resident criterion is legally valid (201304752/1/A3 Raad van State, 2014).
- Surveys and interviews revealed that drug tourists remained largely absent in the southern provinces (not elsewhere) (Snippe and Bieleman, 2014; Nijkamp, Mennes and Bieleman, 2014; Korf, Benschop, Nabben and Wouters, 2014; Van Ooyen and Van der Giessen, 2014).
- The fact that not all of the 103 municipalities with coffee shops enforced the resident criterion in their local policy or in practice led to motions in the Lower House (TK 24077-326, 329, 331, 332, 2014). Some requested the Minister to urge municipalities to enforce the criterion (these were generally accepted), others requested him to abandon the criterion and let the municipalities apply their local priorities (these were rejected).
- Nuisance did not diminish overall (Snippe and Bieleman, 2014).
- Residents who turned away from the coffee shops in 2012 (when the private club criterion also was in force) returned largely to the coffee shops in 2013, but the return certainly falls short of 100% (Nijkamp, Mennes and Bieleman, 2014).
- Illegal cannabis sales, which increased significantly after the introduction of the private club and the residence criterion in 2012 (see note 52), was tempered in 2013 (when only the residence criterion was in force), but remains greater than before the introduction of the new rules (Korf, Benschop, Nabben and Wouters, 2014). This illegal market also causes nuisance (Snippe and Bieleman, 2014).
- Several cases of violations of the residence criterion came before court in 2013 and 2014.
   Jurisprudence showed that the criterion withstands the test of criminal, administrative and civil judges (a.o. ECLI:NL:GHSHE: 2014:383, 390, 391, and 392, 2014;
   ECLI:NL:RVS:204:2181). The criterion stayed unchanged in 2013 and 2014.

In surveys among coffee shop visitors and current cannabis users (in a street survey) the perceived availability of cannabis in the Netherlands (from coffee shops as well as from selling points outside the coffee shops) was also investigated (Nijkamp, Mennes and Bieleman, 2014; Korf, Benschop, Nabben and Wouters, 2014).

- The perceived availability among cannabis users is high, cannabis is quite easy to obtain
  in the Netherlands.
- On a scale from 1 (very difficult to buy cannabis) to 10 (very easy to buy cannabis), the
  average score among coffee shop visitors was 9.3 in 2012 before the introduction of both
  new criteria; 9.0 to 9.3 in October-November 2012, 6 months after the introduction; and
  9.0 to 9.2 in October-November 2013, when the private club criterion was abolished and
  the residence criterion was officially in force.
- There was a significant decrease in perceived availability in the Southern provinces in 2012 and 2013.

- Current users of cannabis in the street survey also perceived cannabis as fairly easy to buy. On a scale from 1 (very difficult to buy cannabis) to 10 (very easy to buy cannabis), they scored on average 9.2-9.5 in 2012 before the introduction of both new criteria; 8.7 to 9.4 in October-November 2012, 6 months after the introduction; and 9.2 to 9.5 in October-November 2013, when the private club criterion was abolished and the residence criterion was officially in force.
- There was a significant decrease in the Southern provinces in 2012, but in 2013 the perceived availability recovered again.

Availability of cannabis for the supply of coffee shops

Legal options for the regulation of cannabis cultivation for the supply of the coffee shops were subject of debate and discussion in 2013 and 2014 (TK 24077-299-302, 307, 2013; TK 24077-315, 317, 323, 324, 325, 330, 2014; TK 24077-336, 2014; EK 32842-J, 2014).

- In January 2014, a 'wiettop' was held in Utrecht and 35 mayors of municipalities with coffee shops signed a "Manifest Joint Regulation" in which they plea for regulation of cannabis cultivation for the supply of coffee shops, in order to reduce nuisance and crime and increase safety and health of cannabis users (Manifest, 2014).
- Twenty-five municipalities conceived 21 concrete plans for regulated cultivation. They did this on request of the Minister of Security and Justice (TK 24077-310, 314, 2013; EK 32842-F, blg 281611, 2014).
- Research concluded that the international treaties leave no room for regulation or legalization of cannabis cultivation for the supply of coffee shops (Van Kempen and Fedorova, 2014).
- The Minister rejected the plans of the municipalities, referring to this study (TK 24077-310, 314, 315, 316, 317).

For more information see Chapter 1.

Availability and access to ecstasy, amphetamine, cocaine

Information on locations and ease of obtaining amphetamine, ecstasy and cocaine by predominantly recreational users is available from a Dutch survey conducted in spring 2012 in the framework of a European study (Frijns and Van Laar 2013). The results were described in the National Report 2013. No new data have become available since then.

However, given the high purity and relatively low prices at consumer level (see § 10.3), it can be concluded that the availability of ecstasy and amphetamine seems to be high.

10.1.2 Supply

Cannabis

In an ongoingstudy the absolute amount of cannabis that is produced in the Netherlands and exported, and the percentage of domestic production that is exported, is estimated (Van der Giessen, Moolenaar and Van Ooyen, 2014). In 2012, the national police estimated the export to be between 48% and 97%, with 85% as most probable estimate (Jansen, 2012).

The export of Dutch cannabis was estimated in recent research (Van der Giessen, Moolenaar and Van Ooyen-Houben, 2014).

- Multiple mathematical models were used for the production and consumption of cannabis. On the basis of these models, the total production of cannabis in the Netherlands amounts to between 53 and 924 tons (when the consumption of Dutch cannabis by non-residents is defined as domestic consumption) and to 92 to 937 tons (when the consumption of non-residents is defined as export). In percentages this is 31% to 96% and 54% to 97% resp.
- A Monte Carlo-simulation was performed to estimate a 95% confidence interval in addition to the lower and upper limits of the mathematical models. This method relies on additional assumptions regarding the within-variable distribution of values. The Monte Carlo-simulation produced a most likely range for the estimated export of Dutch cannabis, taking into account the assumptions and uncertainties. On the basis of this method, the most likely range is 206-549 tons or 78% to 91% (when the consumption of Dutch cannabis by non-residents is defined as domestic consumption) and 231-573 tons or 86% to 95% (when the consumption of non-residents is defined as export).
- The broad ranges are due to unreliability of the available registrations and assumptions.
- A sensitivity analysis was conducted to determine how much the export varies when
  variables are increased or decreased by 1%(point). This revealed that the export
  percentage is very sensitive to the following variables: the percentage of total electricity
  lost that is administrative, the percentage of this electricity loss related to energy fraud
  and the prevalence of recent cannabis use for the general population 15-64 years of age.
- The extent to which variation can be attributed to specific variables was also determined. The majority of the variables do not greatly affect the outcome of the export estimate. This study revealed that ten variables are responsible for roughly 86% to 93% of the variation found. The average yield per plant and the percentage of electricity loss related to energy fraud are the most influential: these two variables are responsible for roughly 50% of the total variation in the current export estimate. The 'capture rate' of Dutch cannabis was estimated using a combination of other variables, just as was the case in previous research. Most of the variables used for the 'capture rate' were among the ten most influential variables discussed previously. The 'capture rate' is therefore very influential.

## Synthetic drugs

With regard to the production of synthetic drugs, there is a report from the National Facility for the Support of Dismantlements (Landelijke Faciliteit Ondersteunen Ontmantelen; Van Rijn, 2014). This Facility is involved in most – not all – dismantlements of laboratories.

 The Facility reports that there were APAAN (alpha-phenylacetoacetonitrile, a preprecursor for BMK, used in the production of amphetamines) conversion laboratories dismantled since 2011.

- The Facility signals the (re)introduction of (new) production processes and preprecursors, and the production and operation of new psycho-active substances.
- Yields are enlarged by optimization of the processes and production hardware.

#### 10.2 Seizures

## Drug seizures

There are no reliable national data about seizures of all drugs in the Netherlands in 2013. Some police regions did not deliver data on the national level and data may contain double countings or not be precise. This was also the case in previous years. Improvements were expected for 2013, but did not occur. Extractions from the regional data systems – where improvements should come from – proved to be difficult to interpret due to a lack of clear-cut definitions about the way that units or weight units of drugs should be registered.

The report from the National Facility for the Support of Dismantlements contains data about synthetic drugs.

- In 2011, 2012, 2013 and 2014, APAAN was seized.
- Pre-precursors for PMK are also seized more often, like PMK glycidate, PMK glycide acid and 3.4 (methyldioxy) phenylacetonitrile. In 2013, there were also seizures of PMK.
- The Facility was involved in 42 and 57 dismantlements of production locations for synthetic drugs in 2012 and 2013 resp. In the first half of 2014 this happened 33 times. This is an increase compared to 2011.
- Most of the locations are amphetamine laboratories or APAAN conversion laboratories, or combinations of both. There is also an increase of MDMA-related laboratories.
- The Facility was involved in the dismantlement of two cocaine extraction laboratories in the first half of 2014 and one location for the coupage of heroin.

Figures about cannabis seizures did improve since 2012-2013. We report about the number of dismantlements, because this is the most reliable number (table 10.1).

- 5,962 cultivation sites were dismantled in 2013, more than in 2012.
- Most of the sites were indoor (5,809), only a fraction is outdoor (153). Outdoor sites were mainly found in Northern and Eastern parts of the Netherlands.

Table 10.1 Number of dismantlements of cannabis cultivation sites, 2005-2013

	2005 <sup>I,II</sup>	2006 <sup>I,II</sup>	2007	2008 <sup>II</sup>	2009 <sup>II</sup>	2010	2011"	2012	2013	
Number	5,610	6,516	5,242	4,731	4,727	5,620	5,435	5,773	5,962	

I. 2005 en 2006: Wouters, Korf & Kroeske (2007) did a study into these figures and conclude that there were 'about 6,000' (p. 126). II. Several (districts of) regions did not deliver data. III. 1 region is missing; the number was estimated by the National Police. Source: National Police, 2014.

## 10.3 Purity and price

10.3.1 Purity

The Drug Information and Monitoring System (DIMS) of the Trimbos Institute provides detailed information on the quality of 'ecstasy' and other drugs submitted by consumers at test locations of drug treatment services. Some of the submitted tablets can be identified visually based on specific characteristics (colour, logo, weight, diameter etc.) and the Marquis test compared with previously analysed tablets. All other samples (non-recognised tablets and all powders and liquids) are sent to the laboratory for chemical analysis. In 2013, the number of delivered drug samples was 10,125, of which 56% were analysed in the laboratory. The majority of drug samples were tablets (6,069) followed by powders (3,661), and the remainder were capsules, liquids, paper trips and miscellaneous formulations. Particularly the number of delivered tablets increased compared to 2012 (5,093 tablets of 9,286 delivered drug samples in total), possibly due to warning campaigns regarding PMMA and high dosage MDMA in ecstasy tablets.

In the text below, a distinction is made between tablets according to how they were sold to the consumer, e.g. tablets sold as ecstasy, amphetamines or something else. Data on powders are similarly distinguished in this paragraph (mainly cocaine and amphetamine). We will first briefly describe the (assumed) composition of consumer samples (tablets) that were identified in 2013 based on the identification lists (without laboratory analysis). Thereafter we will continue with the findings based on laboratory analyses.

#### Tablets identified without lab tests

In 2013 3,562 of a total of 6,069 tablets delivered to the DIMS (59%) were recognised (or classified) on the basis of a visual analysis, Marquis test and recognition lists (Van der Gouwe, 2014). Virtually all tablets were sold as ecstasy or ecstasy-like substance (99%). Whereas in 2009 about one-third of ecstasy tablets did <u>not</u> contain MDMA (or MDEA/MDA), in 2013 this was only 2%. Most tablets that did not contain MDMA contained mCPP (1.0%). Mephedrone has virtually disappeared (0.1% in 2013).

## Laboratory analyses

Ecstasy: high MDMA levels

In 2013, 1,833 tablets sold as ecstasy were analysed in the laboratory. Table 10.3.1 shows the percentage of analysed tablets divided in 5 categories of substance(s). Figure 10.3.1 shows the average MDMA concentration of tablets sold as ecstasy.

- In 2013, 86% of the tablets sold as ecstasy contained an MDMA-like substance as the only scheduled drugs; mostly MDMA and sporadicaly (also) MDEA and MDA. This percentage had been higher (approximately 92%) in previous years, and was comparable to the percentage in 2004, after a drop to 71% in 2008 and 2009.
- The dose of MDMA in tablets sold as ecstasy is historically high. In 2013, the highest measured dose was 366 mg MDMA. Tablets containing at least 1 mg MDMA that were analysed in the laboratory in 2013 contained 111 mg on average and 114 mg in the first

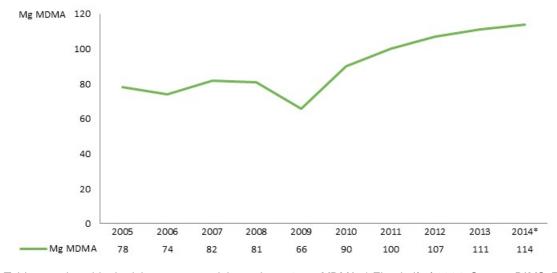
- half of 2014 (see figure 10.3.1). This suggests that the presumed shortage of MDMA precursors in 2009, when the average MDMA concentration was only 66 mg, has reversed.
- The concentration of MDMA in tablets has always shown a wide variation. Excluding ecstasy tablets without any trace of MDMA, in 2013 5% of the ecstasy tablets contained between 1 and 35 mg MDMA, 11% contained between 36 and 70 mg and, 33% between 71 and 105 mg, 26% between 106 and 140 mg and 26% contained a high dose of over 140 mg. Since 2009 a steady increase is seen in the proportion of tablets in the two highest categories. The first half of 2014 shows even a larger proportion in the highest potency category (>140 mg, 27%).
- In general, users subjectively rate doses between 81 and 100 mg as most positive or desirable, while for higher doses the likelihood of desirable effects decrease and the risk of adverse effects increase (Brunt et al. 2012). Thus in 2013, half of the tested tablets contained more MDMA than the previously reported desired dose. Moreover, the increased MDMA content in ecstasy tablets has been associated with an increase in (severity of) health related emergencies at dance parties, although there is no proof of causality (see chapter 6).
- DIMS detected the harmful substance PMMA in an increasing number of ecstasy tablets: from approximately 30 yearly between 2010-2012 to a worrying upward trend of 48 tablets in 2013, and 27 tablets in the first half of 2014.
- Whereas usually PMMA is detected in tablets also containing MDMA, the number of tablets containing a substantial concentration of only PMMA increased: from 6 tablets of 20 mg or more in 2012, to 13 in 2013 and 9 tablets in the first half of 2014. The use of PMMA was associated with several fatal emergencies in 2010 and 2011 (4 with use of PMMA verified, one non-verified), and one in 2013, although other substances might also have contributed to death. The number of nonfatal emergencies is not known.
- As for the past two years, mCPP was again detected less frequently (3.1% in all tablets).
   Mephedrone was not detected in the laboratory analysed tablets in 2013.

Table 10.3.1: Content of tablets sold as 'ecstasy' based on laboratory analyses

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of tablets analysed	1,985	2,140	2,523	2,319	2,183	2,181	2,357	2,183	1,848	1,833
Only MDMA- like substances <sup>1</sup>	91.9%	88.6%	83.2%	84.6%	70.5%	70.8%	81.9%	90.5	92.0 %	86.1%
(Meth) amphetamine	0.8%	4.0%	1.8%	0.7%	1.1%	4.9%	2.9%	2.3%	1.0%	3.0%
MDMA-like substances and (meth)am- phetamine	0.3%	1.4%	2.2%	1.3%	1.4%	1.3%	2.2%	3.0%	2.0%	3.0%
Others <sup>II</sup>	4.5%	0.3%	4.5%	3.8%	7.4%	1.40%	1.8%	1.0%	1.0%	3.9%
Miscellaneous <sup>III</sup>	2.5%	5.7%	8.3%	9.6%	17.7%	21.7%	11.2%	3.2%	4.0%	4.0%

I. Also includes caffeine. II. Category 'others' may include samples with MDMA and pharmacologically active non-scheduled substances. III. In 2009: The category miscellaneous consisted mainly of mCPP (11.60%) and mephedrone (7.4%). In 2010, 2011 and 2012 this category consisted mainly of mCPP and caffeine. In 2013, there were many samples seen with PMMA, with or without MDMA ('others' and 'miscellaneous'). Source: DIMS, Trimbos Institute.

Figure 10.3.1: Average concentration of MDMA in tablets sold as ecstasy



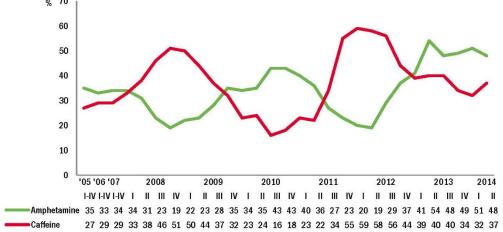
I. Tablets analysed in the laboratory containing at least 1 mg MDMA. \* First half of 2014. Source: DIMS, Trimbos Institute.

#### **Amphetamine**

Purity of amphetamine powders shows strong fluctuations, which may be associated with (temporary) shortages in precursors. Whenever the content of amphetamine drops in the powders, this is compensated by an increase in caffeine, the most preferred adulterant. In 2013, DIMS received 1,237 powders sold as speed.

- The majority of speed powders (97%) contained amphetamine, with an average concentration of 47% in 2013 and 49% in 469 powders containing at least a trace of amphetamine in the first half of 2014. This is a substantial increase compared with 27% in 2012.
- Methamphetamine was rarely detected in speed samples in the Netherlands.
- Figure 10.3.2 suggests an inverse relation between the concentration of amphetamine and caffeine in the samples sold as amphetamine. In 2012, the concentration caffeine was 55%, which was 39% in 2013 and 35% in the first half of 2014.
- Since 2009, the non-controlled substance 4-fluoramphetamine (4-FA) has been detected
  in samples sold as speed. In 2013, there were only 8 4-FA samples sold as speed,
  compared with 46 in 2012. However, 14 samples were sold as 4-FA in 2013 (and it was
  detected in 58 'miscellaneous' samples not sold as speed, cocaine or ecstacy/MDMA),
  suggestive of a specific market for 4-FA (see next paragraph).
- Since 2010, 4-methylamphetamine (4-MA) was increasingly found in speed samples with its peak of 191 (12%) in 2012. It has been suggested that 4-MA is less potent than amphetamine (Wee et al., 2005). Nonetheless, 4-MA has been associated with fatal intoxications and after a quick scan on the risks of 4-MA (CAM, June 2012), it was placed on Schedule I of the Opium Act (immediate placement on June 13 2012 and by way of a governmental decree (algemene maatregel van bestuur) on May 31 2013 (Stb. 2013-207) (see National Report 2013 § 2.1). In 2013, 4-MA was detected in 84 of the samples sold as speed.

Figure 10.3.2: Average concentration of amphetamine and caffeine in speed samples<sup>1</sup>



I. Data based on a selection of samples containing at least a trace of amphetamine and caffeine. Source: DIMS, Trimbos Institute.

#### Cocaine

In 2013, 1,286 powders sold as cocaine were analysed.

- Most samples (95%) contained cocaine (among other substances). In recent years, the
  average cocaine concentration increased from 49% in 2011 to 61% in 2013, and 59% in
  the first half of 2014. In the nineties however, the average was higher; 65-71% (Brunt et
  al., 2010).
- Since 2002, the percentage of cocaine samples containing pharmacologically active adulterants or diluents has strongly increased until 2009 (Brunt et al., 2009), and was thereafter stable at approximately 80%.
- Figure 10.3.3 shows that the proportion of powders sold as cocaine containing levamisole is still very high (63% in 2013 and 66% the first half of 2014). Levamisole is an antihelminticum used mainly for veterinary purposes. It is also used as an anti-cancer drug, but is not officially registered for human use in the Netherlands. The average dose of levamisole was 10.0% in 2013 and 10.5% in the first half of 2014 compared with 7.5% in 2012. In North-America, the use of cocaine adulterated with levamisole has been associated with serious blood diseases. In the Netherlands a few cases have been reported (Vos N, Ned Tijdschr Geneeskunde 2014; CAM 2014).
- The proportion of powders sold as cocaine with phenacetin is lower than in previous years (14% in 2013, 16% in the first half of 2014).
- Hydroxyzine is an antihistamine with anxiolytic properties also used for skin disease that
  was hardly seen in samples sold as cocaine before 2010. The percentage was in 2013
  (8%) similar to 2012 (9%), both much lower than the proportion in 2010-2011.

Levamisole Phenacetin Caffeine Lidocaine - Hydroxyzine Diltiaze m 

Figure 10.3.3: Percentage of powders sold as cocaine also containing medicines

Source: DIMS, Trimbos Institute.

#### Other substances

Several "new psychoactive substances" (or research chemicals) were found in 2013 samples (in total) analysed in the laboratory. Most common were 4-fluoramphetamine (see also § 2.4), followed by, methylone, methoxetamine and 6-AP. The number of samples containing 4-methylamphetamine, which was brought under control of the Opium Act in June 2012, dropped from 199 in 2012 to 84 in 2013.

#### Cannabis

Since 2000, the DIMS also monitors the THC content and prices of cannabis. In 2014, 200 samples of different cannabis products (about 1 gram each) were procured from a random sample of coffee shops and chemically analyzed (Rigter and Niesink 2014). Figure 10.3.4 shows the average concentration of THC in Dutch-grown weed ('nederwiet'), imported weed and imported hashish (see also Standard Table 14). Two types of samples of Dutch marihuana were bought: the most "favorite" variety (normally reported here, unless mentioned otherwise) and the most "potent" variety, according to the perception of owners of coffee shops. In 2010, there was a change in the laboratory assessing the THC concentration, which may have had some impact on the trend data.

- Between 2000 and 2004, the percentage of THC in Dutch-grown weed (most favorite type) doubled from 9% to 20%. Between 2010 and 2013, the average concentration decreased from 17.8% to 13.5% and remained at a similar level (14.6%) in 2014.
- Similar to 2012, there was no significant difference in the percentage of THC in Dutch weed sold as 'most potent type' (15.3%) and the most favorite type (14.6%). In 2013 however, Dutch weed sold as 'most potent type' was indeed stronger than the 'most favorite' type (15.6% against 13.5%).
- The THC concentration in imported weed increased between 2007 and 2009 and dropped again afterwards.
- The percentage of THC in imported hashish dropped from 18.7% in 2006 to 13.3% in 2007, and fluctuated in the consecutive years. These changes are hard to explain.
- Dutch weed contains approximately 3 times more THC than imported weed. This relatively high THC content in Dutch weed is probably due to highly professional cultivation methods, which have been refined more and more during the past years.
- A bill has been prepared to reschedule cannabis containing 15% THC or more from Schedule II to Schedule I of the Opium Act (see chapter 1).
- In 2014, a THC concentration of 15% or more was found in 50% of the (most favorite) Dutch weed samples, and 58% of the imported hashish.

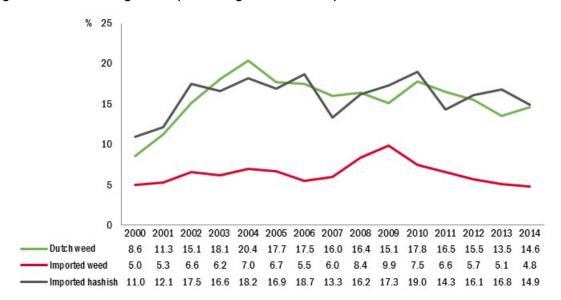


Figure 10.3.4: Average THC percentage in cannabis products

Source: THC-monitor, DIMS, Trimbos Institute (Rigter and Niesink, 2014). Dutch weed: sold as 'most favorite' type.

## THC versus cannabidiol (CBD)

- Cannabis may contain another cannabinoid –cannabidiol- that may counteract some of the effects of THC that are implicated in, among others, psychosis and dependence. In this regard, especially the ratio between THC and CBD – rather than absolute THC content - seems to count.
- Dutch weed contains relatively high average concentrations of THC and very low levels
  of CBD: in 2014 14.6% versus 0.3%, respectively. For imported weed this balance is
  slightly better (4.8% versus 0.2%), but these levels of CBD are still rather low. Imported
  hashish contains the highest levels of CBD (7.2%), and similar levels of THC (14.9%)
  compared to Dutch weed.

## 10.3.2 Prices

Sources on the price of drug samples at consumer level are DIMS/THC-monitor. It should be noted that prices may vary widely between regions (e.g. often higher prices in Amsterdam), but a reliable picture of these differences is not available. Also, prices may vary depending on the amount that is purchased and source of the purchase. Prices reported in this paragraph are not corrected for purity (unless mentioned otherwise).

#### Cannabis

- According to the THC-monitor, the average retail price of a gram of imported marihuana is consistently lower compared to other cannabis products (Figure 10.3.5; see also ST 16).
- Retail prices in coffee shops for Dutch weed sold as 'most potent' were on average higher than prices from Dutch weed sold as 'most favorite' but the differences was not significant (11.4 versus 9.5 euro in 2014).

- The retail price of Dutch marihuana increased steadily since 2006, with the strongest increases reported for Dutch weed sold as most potent type.
- Prices of imported hash also slowly increased from 6.4 euro per gram in 2001, to 9.9 euro per gram in 2013, and was 9.7 euro per gram in 2014.
- Prices for imported marihuana remained low and fluctuated between 4 and 6 euro in the past decade (4.5 euro per gram in 2014).
- Taking 2014 data for all weed samples together (imported weed and the most potent and most favorite types of Dutch weed), a significant correlation was found between prices per gram and THC concentration (r= 0.395 p < 0.001).</li>

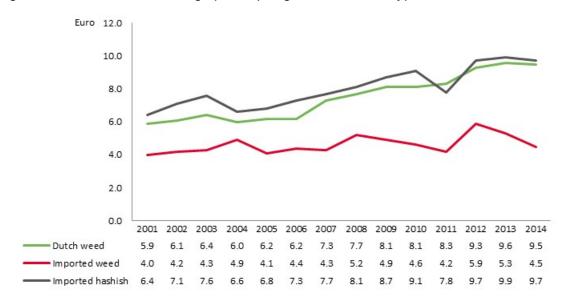


Figure 10.3.5: Trends in average prices per gram of different types of cannabis

Source: THC-monitor, Trimbos Institute (Rigter and Niesink 2014).

### Prices of other drugs

Retail prices of other drugs reported by users who delivered their drugs sample to DIMS did not change very much over the past three years (see table 10.3.2; ST 16). However, the average price per ecstasy tablet seems to have increased between 2008 and 2010, and remained stable since then (about 4 euro). The Amsterdam Antenna monitor 2013 reported a price range from 5-10 euro (excluding outliers), and a 'usual' price of 5 or 6 euro's for a tablet bought from a dealer, and 10 euro when bought at a party. The average price per tablet was 3.5 euro when bought from a dealers home and 4.8 euro in nightlife settings. The price of high dose tablets is generally higher, in contrast with Antenna 2012 reporting no correlation between price and quality of ecstasy tablets (Benschop et al. 2013).

The average price per gram cocaine seems to fluctuate around 50 euro, uncorrected for purity. Nabben et al. (2014) reported that prices Amsterdam dealers have to pay for one kilogram of cocaine have decreased from 34,000-40,000 euro in 2012 to 33,000-38,000 in 2013. However, prices at retail level remained generally stable at between 50 and 70 euro.

Amphetamine is much cheaper than cocaine - one gram generally costs on average 8 euro - which is sometimes mentioned as a reason to use it as a substitute for cocaine.

Prices fluctuated in the past years (table 10.3.4), which may be related to previously described changes in quality (and availability).

Prices of heroin fluctuate over the past years (26 euro on average in 2013), although a slight decreasing trend can be observed. However, note that the number of samples is very low and may not be a representative sample of the heroin available on the heroin consumer market.

Table 10.3.2: Prices (in €; mean) of drug samples delivered to DIMS in 2008 - 2013

	2008	2009	2010	2011	2012	I	2013
Heroin							
Sample size (n)	24	40	24	26	34		26
Mean (€)	40	40	41	37	34		35
Cocaine							
Sample size (n)	637	780	979	679	401		1178
Mean (€)	50	50	45	52	53		52
Amphetamine							
Sample size (n)	843	973	969	843	650		1077
Mean (€)	6	8	6	8	9		8
Ecstasy							
Sample size (n)	1766	1561	1994	1855	1611		3872
Mean (€)	2	3	4	4	4		4

Prices for heroin, cocaine, and amphetamine are given in euro per gram. Price for ecstasy is given in euro per tablet. I. In 2013 a new method was used, assessing prices as continuously rather than categorically. This had little impact in the mean price, but increased the price ranges and reduced non-respons. Source: DIMS, Trimbos Institute.

# Part B: Bibliography and annexes

# 11 Bibliography

#### 11.1 References

- Adviescomissie Drugsbeleid (2009). Geen deuren maar daden: nieuwe accenten in het Nederlands drugsbeleid. Ministeries van VWS, Jusititie en BZK, Den Haag.
- Adviescommissie Analytische Grenswaarden (2014). <u>Advies analytische grenswaarden voor drugs in</u>
  <a href="https://doi.org/10.2014/">https://doi.org/10.2014/</a>). <u>Advies analytische grenswaarden voor drugs in</u>
  <a href="ht
- Andriessen, I., Fernee, H., and Wittebrood, K. (2014). <u>Perceived discrimination in the Netherlands</u>. SCP, Den Haag
- Barendregt, C. and Wits, E. (2013). Proeftuinen van herstel. Verslaving 9, (4), 34-46
- Barendregt, C., Wits, E., De Haan, G., Schippers, R., and Van Duin, L. (2013). Liggen we op koers? Herstelondersteunende verslavingszorg en inzet van ervaringskennis in vier praktijkvoorbeelden. IVO Instituut voor Onderzoek naar Leefwijzen en Verslaving, Rotterdam.
- Benschop, A., Nabben, T., and Korf, D. (2009). Antenne 2008: trends in alcohol, tabak en drugs bij jonge Amsterdammers. Rozenberg Publishers, Amsterdam.
- Benschop, A., Nabben, T., and Korf, D.J. (2013). Antenne 2012: Trends in alcohol, tabak en drugs bij jonge Amsterdammers. Rozenberg Publishers, Amsterdam.
- Berger, F.H., Nieboer, K.H., Goh, G.S., Pinto, A., and Scaglione, M. (2014). Body packing: a review of general background, clinical and imaging aspects. Radiol Med
- Bieleman, B., Nijkamp, R., Reimer, J., and Haaijer, M. (2013). Coffeeshops in Nederland: aantal coffeeshops en gemeentelijk beleid 1999-2012. Intraval, Groningen-Rotterdam.
- Bijl, R., Boelhouwer, J., Cloïn, M., and Pommer, E. (2012). The Social State of the Netherlands 2011. The Netherlands Institute for Social Research | SCP, The Hague.
- Blanckaert, P., Van Amsterdam, J.C.G., Brunt, T.M., Van den Berg, J.D.J., Van Durme, F., Maudens, K. et al. (2013). 4-Methyl-amphetamine: a health threat for recreational amphetamine users. J Psychopharmacol 27, (9), 817-822.
- Boendermaker, M. and Bieleman, B. (2013). Monitor regionaal kompas Oost-Veluwe: metingen 2009 tot en met 2012. Intraval, Groningen.
- Boertien, D., and Van Bakel, M. (2013). Handreiking voor de inzet van ervaringsdeskundigheid vanuit de geestelijke gezondheidszorg. Trimbos-instituut, Utrecht.
- Bovens, R.H.L.M., Van Etten, D.M., and Weingart, S.W.S.M. (2013). Ouderen en verslaving: adviesrapport in opdracht van Stichting Resultaten Scoren. Trimbos-instituut/Victas, Utrecht.
- Brunt T.M., Niesink R.J., and Van den Brink W. (2013). Impact of transient instability of the ecstasy market on health concerns and drug use patterns in The Netherlands. Int J Drug Policy 23: 134-140.
- Brunt T.M., Van Amsterdam J.G., and Van den Brink W. (2013). GHB, GBL and 1,4-BD addiction. Curr Pharm Des; (epub ehead of print).
- Brunt, T.M., Koeter, M.W., Niesink, R.J., and Van den Brink, W. (2012). Linking the pharmacological content of ecstasy tablets to the subjective experiences of drug users. Psychopharmacology (Berl) 220, (4), 751-762.
- Bulten, E. and Nijman, H. (2009). Veel psychiatrische stoornissen onder gedetineerden op reguliere afdelingen van penitentiaire inrichtingen. Nederlands Tijdschrift voor Geneeskunde 153, (A634), 1-6.
- Buster, M. and Van Brussel, G. (2011). De GGD Amsterdam en de Openbare Geestelijke Gezondheidszorg: OGGZ-monitor 2010. GGD Amsterdam, Amsterdam.

- CAM (2009). CAM quick scan rapportage levamisol. RIVM, Bilthoven.
- CAM (2012). CAM Quick Scan rapportage van 4-methylamfetamine (4-MA). RIVM, Bilthoven.
- Castaneto, M.S., Gorelick, D.A., Desrosiers, N.A., Hartman, R.L., Pirard, S., and Huestis, M.A. (2014). Synthetic cannabinoids: Epidemiology, pharmacodynamics, and clinical implications. <u>Drug Alcohol Depend</u>
- Coumans, M. and Van Beuningen, J. (2013). 27 duizend daklozen. CBS, Den Haag
- Croes, E. and Van der Veen, C. (2012). Hepatitis C in de verslavingszorg: de effectiviteit van de hepatitis C informatiecampagne. Trimbos-instituut, Utrecht.
- Cruts, A.A.N., and Van Laar, M.W. (2010). Aantal problematische harddrugsgebruikers in Nederland Trimbos-instituut, Netherlands Institute of Mental Health and Addiction, Utrecht, the Netherlands.
- Cruts, A.A.N., Van Laar, M., and Buster, M. (2013). Aantal en kenmerken van problematische opiatengebruikers in Nederland. Trimbos-instituut, Utrecht.
- De Greeff, J., Franken, F., and Van Dalen, W.E. (2014). <u>Gemeentelijke uitvoering van de Drank- en Horecawet: analyse stand van zaken 2014</u>. STAP, Utrecht
- De Looze, M.E. (2013). Young, wild and free? The social and cultural context of adolescent risk behavior. Universiteit Utrecht, Utrecht.
- De Vet, R., Van Luijtelaar, M.J., Brilleslijper-Kater, S.N., Vanderplasschen, W., Beijersbergen, M.D., and Wolf, J.R. (2013). Effectiveness of case management for homeless persons: a systematic review. Am J Public Health 103, (10), e13-e26.
- De Vos AS and Kretzschmar MEE. (2013). The efficiency of targeted intervention in limiting the spread of HIV and hepatitis C virus among injecting drug users. J Theor Biol 333:126-134.
- De Vos AS, Van de Helm JJ, Matse A, Prins M, and Kretzschmar MEE.(2013). Decline in incidence of HIV and hepatitis C virus infection among drug users in Amsterdam: evidence for harm reduction? Addiction 108: 1070-1081.
- de Vos, A.S., Prins, M., Coutinho, R.A., van der Helm, J.J., and Kretzschmar, M.E. (2014). Treatment as prevention among injecting drug users; extrapolating from the Amsterdam cohort study. AIDS **28**, (6), 911-918
- De Wael, N.V. and Lucassen, A. (2014). Zijn gemeenten klaar om mensen met psychische problemen aan het werk te helpen? Landelijke tussenrapportage Open voor Werk van het Landelijk Platform GGz. LPGGz, Utrecht
- Doekhie, J., Nabben, T., and Korf, D.J. (2010). NL.Trendwatch: gebruikersmarkt uitgaansdrugs in Nederland, 2008-2009. Rozenberg, Amsterdam.
- E.K.32398-F.Eerste Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 32398 nr.F (2013). Vaststelling van een Wet forensische zorg en daarmee verband houdende wijzigingen in diverse andere wetten (Wet forensische zorg); Memorie van antwoord. Sdu Uitgevers, Den Haag.
- E.K.32842-A.Eerste Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 32842 nr.A (2013). Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepteelt. Sdu Uitgvers, Den Haag.
- E.K.32842-B.Eerste Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 32842 nr.B. (2013). Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepteelt; Memorie van antwoord. Sdu Uitgevers, Den Haag.
- E.K.32842-F blg-281611.Eerste Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 32842 nr.F bijlage 281611 (2014). <u>Overzicht Gemeentelijke Plannen en Voornemens Wietteelt December 2013 bijlage bij 32842 ek-F</u>. Eerste Kamer der Staten-Generaal, Den Haag

- E.K.32842-H.Eerste Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 32842 nr H (2014). Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepteelt; Verslag van een schriftelijk overleg. Eerste Kamer der Staten-Generaal, Den Haag
- E.K.32842-I.Eerste Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 32842 nr I (2014). Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepteelt; Brief van de minister van Veiligheid en Justitie aan de Voorzitter van de Eerste Kamer der Staten-Generaal. Eerste Kamer der Staten-Generaal, Den Haag
- E.K.32842-J.Eerste Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 32842 nr.J (2014). Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepteelt; verslag van een mondeling overleg. Eerste Kamer der Staten-Generaal, Den Haag
- E.K.33823-A.Eerste Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 33823 nr A (2014). EU-voorstel: Richtlijn tot wijziging van Kaderbesluit 2004/757/JBZ betreffende de vaststelling van minimumvoorschriften met betrekking tot de bestanddelen van strafbare feiten en straffen op het gebied van de illegale drugshandel COM(2013)618 en EU-voorstel: Verordening betreffende nieuwe psychoactieve stoffen COM(2013)619; Brief inzake EU-voorstel: Richtlijn tot wijziging van Kaderbesluit 2004/757/JBZ betreffende de vaststelling van minimumvoorschriften met betrekking tot de bestanddelen van strafbare feiten en straffen op het gebied van de illegale drugshandel COM(2013)618 en EU-voorstel: Verordening betreffende nieuwe psychoactieve stoffen COM(2013)619. Tweede Kamer der Staten-Generaal, Den Haag
- E.K.33823-E.Eerste Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 33823 nr.E (2014). <u>EU-voorstel: Richtlijn tot wijziging van Kaderbesluit 2004/757/JBZ betreffende de vaststelling van minimumvoorschriften met betrekking tot de bestanddelen van strafbare feiten en straffen op het gebied van de illegale drugshandel COM(2013)618 en EU-voorstel: <u>Verordening betreffende nieuwe psychoactieve stoffen COM(2013)619; Verslag van een schriftelijk overleg inzake vragen naar aanleiding van reactie van Europese Commissie inzake COM(2013)618 en -619.</u> Tweede Kamer der Staten-Generaal, Den Haag</u>
- E.K.Handelingen 2012-2013, 22-3. Eerste Kamer der Staten-Generaal vergaderjaar 2012-2013 vergaderingsnummer 22-3,18 april 2013,pag.22-3 (2013). Behandeling van het wetsvoorstel Wijziging van de Wet bevordering integriteitsbeoordelingen door het openbaar bestuur naar aanleiding van de evaluatie van die wet, alsmede uitbreiding van de reikwijdte ervan en wijziging van enige andere wetten (Evaluatie- en uitbreidingswet Bibob) (32676); en andere wetsvoorstellen. Sdu Uitgevers, Den Haag.
- European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2014). <u>Synthetic cannabinoids</u> in Europe: perspectives on drugs. EMCDDA, Lisbon
- Ferwerda, H., Van Hasselt, N., Van Ham, T., and Voorham, L. (2012). De juiste snaar? Professionals met een publieke taak en de omgang met overlast, agressie en geweld als gevolg van alcohol- en/of drugsgebruik. WODC, Den Haag.
- Gemeente Heerlen, Gemeente Roermond, and Gemeente Venlo (2013). De voor- en achterdeur 'open'; voorstel tot een pilot voor de regulering van de hennepteelt in Limburg.
- Gemeente Heerlen/Gemeente Roermond/ Gemeente Venlo, Heerlen/Roermond/Venlo.
- Gemeente Rotterdam (2012). Verkenning verplaatsingsmogelijkheden coffeeshops in de gemeente Rotterdam. Gemeente Rotterdam, Rotterdam.
- Gemeente Utrecht (2013). Voortgangsbericht Cannabisexperimenten [brief van 10 september 2013]. Gemeente Utrecht, Utrecht.
- GGD Amsterdam. Richtlijn Excited Delirium Syndroom (EDS). (2013). Amsterdam: GGD Amsterdam.

- Goosens, F.X., Frijns, T., Van Hasselt, N.E., and Van Laar, M.W. (2013). Het Grote Uitgaansonderzoek 2013: uitgaanspatronen, middelengebruik en risicogedrag onder uitgaande jongeren en jongvolwassenen. Trimbos-instituut, Utrecht.
- Grady, B., Van den Berg, C., Van der Helm, J., Schinkel, J., Coutinho, R., Krol, A. et al. (2011). No impact of hepatitis C virus infection on mortality among drug users during the first decade after seroconversion. Clin Gastroenterol Hepatol. 9, (9), 786-792.
- Grady, B.P., Prins, M., Rebers, S., Molenkamp, R., Geskus, R.B., and Schinkel, J. (2014). BMI, male sex and IL28B genotype associated with persistently high hepatitis C virus RNA levels among chronically infected drug users up to 23 years following seroconversion. <u>J Viral Hepat.</u>
- Grebely J, Page K, Sacks-Davis R, Schim van der Loeff M, Rice TM, Bruneau J, Morris MD, Hajarizadeh B, Amin J, Cox AL, Kim AY, Govern BH, Schinkel J, et al. (2013). The effects of female sex, viral genotype and IL28B genotype on spontaneous clearance of acute hepatitis C virus infection. Hepatology In press.
- Hahne, S.J., De Melker, H.E., Kretzschmar, M., Mollema, L., van der Klis, F.R., van der Sande, M.A. et al. (2012). Prevalence of hepatitis B virus infection in The Netherlands in 1996 and 2007. Epidemiol Infect 140, (8), 1469-1480.
- Hammink, A., Schrijvers, C., and Van de Mheen, D. (2014). Alcohol- en drugsgebruik onder mensen met een licht verstandelijke beperking. <u>Verslaving</u> **10**, (2), 57-70
- Hanck L and Schellekens AF.(2013). Halucinogen persisiting perception disorder after ecstasy use. NTvG 157: A5649.
- Havinga, P. and Van der Poel, A. (2011). Gebruiksruimten in Nederland. Update van de handreiking bij organisatie en inrichting. Trimbos-instituut, Utrecht.
- Health Council of the Netherlands. (1997). Committee on Hepatitis C. Detection and treatment of people with hepatitis C. Rijswijk: Health Council of the Netherlands, Report No: 1997/19.
- Hondebrink L, Tan S, Hermans E, Van Kleef RG, Meulenbelt J, Westerink RH. (2013). Additive inhibition of human  $\alpha1\beta2\gamma2$  GABAA receptors by mixtures of commonly used drugs of abuse. Neurotoxicology, 35: 23-29.
- Hotho, D.M. (2013). Chronic hepatitis C: clinical and societal evaluations. Erasmus Universiteit Rotterdam, Rotterdam.
- Huijnk, W., Gijsberts, M., and Dagevos, J. (2014). <u>Jaarrapport integratie 2013: Participatie van migranten op de arbeidsmarkt</u>. SCP, Den Haag
- Hurd, Y.L., Michaelides, M., Miller, M.L., and Jutras-Aswad, D. (2014). Trajectory of adolescent cannabis use on addiction vulnerability. <u>Neuropharmacology</u> **76 Pt B**, 416-424
- Inspectie Veiligheid en Justitie (2013). De uitvoering van de ISD-maatregel: vervolgonderzoek. Inspectie Veiligheid en Justitie, Den Haag.
- Inspectie Veiligheid en Justitie (2013). Nationale Politie op Koers? Eerste onderzoek naar de mijlpalen en resultaten van acht operationele doelen in de periode 1 januari 1 juli 2013.
- Inspectie Veiligheid enh Justitie, Den Haag.
- Intraval/nVWA (2013). <u>Factsheet Inventarisatie naleefniveau rookvrije horeca najaar 2013</u>. Intraval/nVWA, Groningen/Den Haag
- Jansen, F. (2012). De rol van Nederland in de internationale hasjhandel: Quickscan ten behoeve van het Nationaal Dreigingsbeeld zware of georganiseerde criminaliteit. KLPD/DNR, Driebergen.
- Jansen, F. (2012a). Georganiseerde hennepteelt: criminaliteitsbeeldanalyse 2012. KLPD-Dienst Nationale Recherche, Driebergen.
- Kalidien, S.N. and De Heer-De Lange, N.E. (2013). Criminaliteit en Rechtshandhaving 2012: ontwikkelingen en samenhangen. WODC/CBS/Raad voor de Rechtspraak, Den Haag.
- Kepper, A. (2013). Substance use among adolescents in special education and residential youth care: prevalence, onset and risk factors. Universiteit Utrecht, Utrecht.

- KLPD/DNR, Driebergen.
- KLPD-Dienst Nationale Recherche (2012a). Jaarverslag synthetische drugs en precursoren 2011. KLPD/DNR, Driebergen.
- KLPD-Dienst Nationale Recherche (2012b). Synthetische drugs en precursoren 2012: criminaliteitsbeeldanalyse 2012. KLPD/DNR, Driebergen.
- KLPD-Dienst Nationale Recherche (2012c). Criminaliteitsbeeldanalyse 2012: Heroïne.
- Kok, T., De Haan, H.A., Van der Meer, M., Najavits, L.M., and De Jong, C.A.J. (2015). Screening of Current Post-Traumatic Stress Disorder in Patients with Substance Use Disorder Using the Depression, Anxiety and Stress Scale (DASS-21): A Reliable and Convenient Measure.

  <u>European Addiction Research</u> 21, (71), 77
- Korf DJ, Nabben T, Benschop A, Ribbink K, Van Amsterdam JGC.(2014). Risk factors of γ-hydroxybutyrate overdosing. Eur Addict Res 20: 66-74.
- Korf, D., Benschop, A., and Wouters, M. (2013). De illegale gebruikersmarkt van cannabis, In Het Besloten club- en het Ingezetenencriterium voor coffeeshops: evaluatie van de implementatie en de uitkomsten in de periode mei-november 2012: tussenrapportage.M.
- Korf, D.J., Benschop, A., Nabben, T., and Wouters, M. (2014). De illegale gebruikersmarkt, In <u>Coffeeshops, toeristen en lokale markt. Evaluatie van het Besloten club-en het Ingezetenencriterium voor coffeeshops: eindrapport.</u>M. Van Ooyen-Houben, B Bieleman, and D J Korf, (eds.), pp. 133-186. WODC, Den Haag
- Kronenberg, L.M., Slager-Visscher, K., Goossens, P.J., Van den Brink, W., and van, A.T. (2014). Everyday life consequences of substance use in adult patients with a substance use disorder (SUD) and co-occurring attention deficit/hyperactivity disorder (ADHD) or autism spectrum disorder (ASD): a patient's perspective. <a href="Mailto:BMC Psychiatry">BMC Psychiatry</a> 14, 264
- Kruize, A. and Bieleman, B. (2014). <u>Monitor dakloosheid en chronische verslavingsproblematiek</u>
  <u>Enschede 2014: Metingen 2008-2013</u>. Intraval, Groningen-Rotterdam
- Krul J. 2013. Mass gathering medicines at raves: incidents and substance-related emergencies. Amsterdam: Vrije Universiteit PhD thesis.
- Laghael, F., Van Wamel, A., Van der Poel, A., and De Gee, A. (2013). <u>Harm Reduction in Nederland:</u>
  <u>inventarisatie van opiaatonderhoudsprogramma's, gebruiksruimtem en Harm Reduction</u>
  binnen de (F)ACT-teams. Trimbos-instituut, Utrecht
- Landelijk Bureau BIBOB (2013). Jaarverslag 2012. Ministerie van Veiligheid en Justitie/Jusits/Landelijk Bureau Bibob, Den Haag.
- Leopold, S.J., Grady, B.P., Lindenburg, C.E., Prins, M., Beuers, U., and Weegink, C.J. (2014). Common bile duct dilatation in drug users with chronic hepatitis C is associated with current methadone use. <u>J Addict Med</u> **8**, (1), 53-58
- Liebregts, N., Van der Pol, P., Van Laar, M., De Graaf, R., and Van den Brink, W. (2013). The role of parents peers and partners in cannabis use and dependence trajectories among young adult frequent cannabis users. Contemporary Drug Problems In press.
- Liebregts, N., Van der Pol, P., van, L.M., de, G.R., Van den Brink, W., and Korf, D.J. (2013b). The Role of Study and Work in Cannabis Use and Dependence Trajectories among Young Adult Frequent Cannabis Users. Front Psychiatry 4, 85.
- Lokman, S. and Bransen, E. (2014). <u>Handboek implementatie Moti-4: Motiverend traject bij middelengebruik, gokken of gamen</u>. Trimbos-instituut, Utrecht
- Lukashov VV, Jurriaans S, Bakker M, and Berkhout B. (2013). Transmission of risk-group specific HIV-1 strains among Dutch drug users for more than 20 years and their replacement by nonspecific strains after switching to low-harm, drug practices. J Acquir immune defic syndr 62, 234-238.
- Lukashov VV, Op de Coul EL and Coutinho RA, (1998). HIV-1 strains specific for Dutch injecting drug users in heterosexually infected individuals in the Netherlands. AIDS 12:635-641.

- Malmberg, M., Kleinjan, M., Overbeek, G., Vermulst, A., Lammers, J., Monshouwer, K. et al. (2014). Substance use outcomes in the Healthy School and Drugs program: Results from a latent growth curve approach. Addict Behav **42C**, 194-202
- Matser, A., Urbanus, A., Geskus, R., Kretzschmar, M., Xiridou, M., Buster, M. et al. (2011). The effect of hepatitis C treatment and HIV coinfection on the disease burden of hepatitis C among injecting drug users in Amsterdam. Addiction.
- Matser, A., Urbanus, A., Geskus, R., Kretzschmar, M., Xiridou, M., Buster, M. et al. (2011). The effect of hepatitis C treatment and HIV coinfection on the disease burden of hepatitis C among injecting drug users in Amsterdam. Addiction.
- Mikolajczyk, R.T., Horn, J., Prins, M., Wiessing, L., and Kretzschmar, M. (2014). Trajectories of injecting behavior in the Amsterdam Cohort Study among drug users. <u>Drug Alcohol Depend</u> **144**, 141-147
- Ministerie van Veiligheid en Justitie (2013). Coffeeshopbeleid [brief van 4 februari 2013]. Sdu Uitgevers, Den Haag.
- Ministerie van Veiligheid en Justitie (2013a). Coffeeshopbeleid [brief van de Minister van Veiligheid en Justitie aan de Gemeente Maastricht, kenmerk 422760, d.d. 30 augustus 2013]. Ministerie van Veiligheid en Justitie, Den Haag.
- Ministerie van Volksgezondheid Welzijn en Sport (VWS) (2013). Alles is gezondheid...het Nationaal Programma Preventie 2014-2016. Ministerie van VWS, Den Haag.
- Mol, T., Wisselink, J., Kuijpers, W., and Dijkstra, B. (2014). GHB: recidive op eenzame hoogte. Verslaving **10**, (3), 69-79
- Monshouwer, K., Van Dorsselaer, S., Verdurmen, J., and Vollebergh, W. (2012). Factsheet ESPAD 2011: het gebruik van alcohol, tabak en drugs onder Nederlandse scholieren vergeleken met de rest van Europa. Trimbos-instituut, Utrecht.
- Moolenaar, D.E.G., Nauta, B., and Van Tulder, F.P. (2013). Kosten van criminaliteit, In Criminaliteit en rechtshandhaving 2012: ontwikkelingen en samenhangen.S.N. Kalidien and N E De Heer-De Lange, (eds.), pp. 227-257. CBS/WODC/Raad voor de rechtspraak, Den Haag.
- Moolenaar, D.E.G., Van Rosmalen, M.M., Vlemmings, M., and Van Tulder, F.P. (2014). Kosten van criminaliteit, In <u>Criminaliteit en Rechtshandhaving 2013</u>.N.E. De Heer-De Lange and S N Kalidien, (eds.), pp. 223-254. CBS/WODC/Raad voor de Rechtspraak, Den Haag
- Nabben, T., Benschop, A., and Korf, D.J. (2012). Antenne 2011: trends in alcohol, tabak en drugs bij jonge Amsterdammers. Rozenberg Publishers, Amsterdam.
- Nabben, T., Benschop, A., and Korf, D.J. (2012). Antenne 2011: trends in alcohol, tabak en drugs bij jonge Amsterdammers. Rozenberg Publishers, Amsterdam.
- Nationaal Netwerk Drugsexpertise (2012). Ontmantelingen 2011. NND Nieuwsbrief 10, (1), 2.
- Niesink, R. and Van Laar, M. (2012). THC, CBD en gezondheidseffecten van wiet en hasj: recente inzichten. Trimbos-instituut, Utrecht.
- Nijkamp, R. and Bieleman, B. (2013). Coffeeshopbezoek, In Het Besloten club- en het Ingezetenencriterium voor coffeeshops: evaluatie van de implementatie en de uitkomsten in de periode mei-november 2012: tussenrapportage.M. Van Ooyen-Houben, B Bieleman, and D Korf, (eds.), pp. 117-129. WODC, Den Haag.
- Nijkamp, R., Mennes, R., and Bieleman, B. (2014). Coffeeshopbezoek, In <u>Coffeeshops, toeristen en lokale markt. Evaluatie van het Besloten club-en het Ingezetenencriterium voor coffeeshops: eindrapport.</u>M. Van Ooyen-Houben, B Bieleman, and D J Korf, (eds.), pp. 97-130. WODC, Den Haag
- Norberg, M.M., Kezelman, S., and Lim-Howe, N. (2013). Primary prevention of cannabis use: a systematic review of randomized controlled trials. <u>PLoS ONE</u> **8**, (1), e53187

- Norden, L., VAN, V.M., Lidman, C., Todorov, I., Guarita, B., Kretzschmar, M. et al. (2013). Hepatitis C among injecting drug users is two times higher in stockholm, sweden than in rotterdam, the Netherlands. Subst Use Misuse 48, (14), 1469-1474.
- Nusselder, W.J., Slockers, M.T., Krol, L., Slockers, C.T., Looman, C.W., and van Beeck, E.F. (2013). Mortality and life expectancy in homeless men and women in rotterdam: 2001-2010. PLoS ONE 8, (10), e73979.
- Openbaar Ministerie (2012). Feitenboekje: lijst van feiten betreffende misdrijven, overtredingen en Muldergedragingen. Commissie Feiten en Tarieven, Utrecht.
- Openbaar Ministerie (2013). Feitenboekje: lijst van feiten betreffende misdrijven, overtredingen en Muldergedragingen. Commissie Feiten en Tarieven, Utrecht.
- Openbaar Ministerie (2013a). Jaarbericht 2012. Openbaar Ministerie, Den Haag.
- Openbaar Ministerie and Politie (2013). Verantwoording aanpak georganiseerde criminaliteit 2012. OM/Politie, Den Haag.
- Openbaar Ministerie and Politie (2014). <u>Verantwoording aanpak georganiseerde criminaliteit 2013</u>. OM/Politie, Den Haag
- Openbaar Ministerie-College van procureurs-generaal (2011). Consequenties cannabisaanbeveling van de expertcommissie lijstensystematiek Opiumwet [brief van 12 augustus 2011]. Openbaar Ministerie, Den Haag.
- Oteo Pérez, A., Benschop, A., Blanken, P., and Korf, D.J. (2015). Criminal Involvement and Crime Specialization Among Crack Users in the Netherlands. <u>European Addiction Research</u> **21**, (1), 53-62
- Oteo Pérez, A., Cruyff, M.J.L.F., Benschop, A., and Korf, D.J. (2013). Estimating the prevalence of crack dependence using capture-recapture with institutional and field data: A three-city study in the Netherlands. Substance Use & Misuse 48, (1-2), 173-180.
- Oudejans, S. and Spits, M. (2013). Investeren in verslavingspreventie: beschrijving van Nederlandse programma's voor jeugd en jongeren. Stichting Resultaten Scoren/Mark Bench, Amersfoort.
- Permentier, M., Kullberg, J., and Van Noije, L. (2013). Werk aan de wijk: Een quasi-experimentele evaluatie van het krachtwijkenbeleid. Sociaal en Cultureel Planbureau, Den Haag.
- Pieters T, De Hon O. (2013). Faster, higher, stronger: knowledge about old and new doping substances. Nederlands Tijdschrift voor Geneeskunde 157: A6450.
- Planije, M., Tuynman, M., and Hulsbosch, L. (2014). Monitor Plan van Aanpak Maatschappelijke Opvang: Rapportage 2013/'14: Amsterdam, Rotterdam, Den Haag en Utrecht. Trimbosinstituut, Utrecht
- Pröpper, I., Plaisier, J., Mol, M., and Rouw, M. (2014). <u>De maatregel 'Inrichting Stelselmatige Daders' voor jongvolwassen veelplegers: de uitvoeringspraktijk en lessen voor de toekomst</u>. Partners+Pröpper/Impact, Vught/Amsterdam
- Redactie NND-nieuwsbrief (2012). Hennep(teelt). NND Nieuwsbrief 10, (1), 2.
- RIEC and LIEC (2013). Jaarverslag 2012. RIEC, Den Haag
- RIEC and LIEC (2014). Jaarverslag RIEC/LIEC 2013. LIEC, Den Haag
- Rigter, H., Henderson, C.E., Pelc, I., Tossmann, P., Phan, O., Hendriks, V. et al. (2013). Multidimensional family therapy lowers the rate of cannabis dependence in adolescents: a randomised controlled trial in Western European outpatient settings. <a href="Drug Alcohol Depend">Drug Alcohol Depend 130</a>, (1-3), 85-93
- Rigter, S. and Niesink, R. (2013). THC-concentraties in wiet, nederwiet en hasj in Nederlandse coffeeshops (2012-2013). Trimbos-instituut, Utrecht.
- Rijksoverheid (2012). Taskforce B5 pakt meer georganiseerde criminaliteit aan [nieuwsbericht 06-12-2012]. Rijksoverheid, Den Haag.

- Rijlaarsdam, J., Smits, L.J.M., and Van de Laar, M.J.W. (1999). De aangifte van hepatitis B in Nederland in de periode 1976-1998. Infectieziektenbulletin 10, 178-182.
- RIVM (2014). Volksgezondheid Toekomst Verkenning 2014. RIVM, Bilthoven
- Roberts, H., Van Dijk, L., and Van der Vlugt, I. (2013). Ik red me wel! Zwerfjongeren, middelengebruik en seksueel gedrag: Een verkenning naar ervaringen en behoeften aan preventie en ondersteuning van zwerfjongeren. Mainline/Rutgers WPF, Utrecht.
- Rondy, M., Wiessing, L., Hutchinson, S.J., Mathei, C., Mathis, F., Mravcik, V. et al. (2012). Hepatitis C prevalence in injecting drug users in Europe, 1990-2007: impact of study recruitment setting. Epidemiol Infect, 1-10.
- Rutten, R., and Schippers, G.M. (2013). Integratie verslavingszorg en ggz: leidt het tot betere zorg? Verslaving [Addiction] 9, (2), 3-14.
- Schaap, C. and Kools, J.P. (2013). Bevindingen veldwerk voor het onderzoek 'Problematische opiatengebruikers in Nederland', In Aantal problematische harddrugsgebruikers in Nederland. A.A.N. Cruts and M. Van Laar, (eds.), pp. 25-32. Trimbos-instituut, Utrecht.
- Significant (2012). Impactanalyse Zware Cannabis op lijst 1. Significant, Barneveld.
- Slockers, M.T., Nusselder, W.J., Looman, C.W.N., Slockers, C.J.T., Krol, L., and van Beeck, E.F. (2014). The effect of local policy actions on mortality among homeless people: a before–after study. European Journal of Public Health [Epub ahead of print]
- Smits, J., Sibma, A., Roodnat, J., and Schudde, B. (2013). Bestuurlijke aanpak georganiseerde criminaliteit: Onderzoek naar de stand van zaken in 2012. Arena Consulting/Pro Facto, Deventer/Groningen.
- Snippe, J. and Bieleman, B. (2012). Onderzoek invoering wietpas Dordrecht. Intraval, Groningen-Rotterdam.
- Snippe, J. and Bieleman, B. (2013). Omwonenden van coffeeshops, In Het Besloten club- en het Ingezetenencriterium voor coffeeshops: evaluatie van de implementatie en de uitkomsten in de periode mei-november 2012: tussenrapportage.M. Van Ooyen-Houben, B Bieleman, and D Korf, (eds.), pp. 107-116. WODC, Den Haag.
- Snippe, J. and Bieleman, B. (2014). Ervaringen omwonenden, In <u>Coffeeshops, toeristen en lokale</u> <u>markt. Evaluatie van het Besloten club-en het Ingezetenencriterium voor coffeeshops:</u> <u>eindrapport.</u>M. Van Ooyen-Houben, B Bieleman, and D J Korf, (eds.), pp. 81-96. WODC, Den Haag
- Snippe, J., Nijkamp, R., and Bieleman, B. (2013). Onderzoek drugsbeleid Venlo 2012-2013. Intraval, Groningen-Rotterdam.
- Snoek, A., Wits, E., Van der Stel, J., and Van der Mheen, D. (2010). Kwetsbare groepen. Kwetsbare groepen jeugdigen en (problematisch) middelengebruik: visie en interventiematrix. IVO, Rotterdam.
- Sociaal en Cultureel Planbureau (SCP) (2013). Armoedesignalement 2013. SCP, Den Haag
- Soetens, L.C., Koedijk, F.D.H., Van den Broek, I.V.F., Vriend, H.J., Op de Coul, E.L.M., Van Aar, F. et al. (2013). Sexually transmitted infections, including HIV, in the Netherlands in 2012. RIVM, Bilthoven.
- Staten-Generaal-33593 A-Nr.1.Eerste en Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 33593 A-1 (2013). Besluit, houdende wijziging van lijst I, behorende bij de Opiumwet, in verband met plaatsing op deze lijst van hasjiesj en hennep met een gehalte aan tetrahydrocannabinol (THC) van 15 procent of meer . Sdu Uitgevers, Den Haag.
- Stb 2002-201. Staatsblad van het Koninkrijk der Nederlanden Jaargang 2002 nr 201 (2002). Besluit van 28 juni 2002, houdende vaststelling van het tijdstip van inwerkingtreding van de Wet van 18 april 2002 tot wijziging van de Tabakswet (Stb. 2002,201). Sdu Uitgevers, Den Haag.
- Stb 2004-351. Staatsblad van het Koninkrijk der Nederlanden jaargang 2004, nr.3. (2004). Wet van 9 juli 2004 tot wijziging van het Wetboek van Strafrecht, het Wetboek van Strafvordering en de

- Penitentiaire beginselenwet (plaatsing in een inrichting voor stelselmatige daders). Sdu Uitgevers, Den Haag.
- Stb 2013-1. Staatsblad van het Koninkrijk der Nederlanden jaargang 2013 nr 1 (2013). Besluit van 18 december 2012, houdende wijziging van lijst II, behorende bij de Opiumwet, in verband met plaatsing op deze lijst van het middel Qat. Sdu Uitgevers, Den Haag.
- Stb 2013-205 (2013). Besluit van 7 juni 2013, houdende enkele aanpassingen van het Besluit Bibob, het Besluit justitiële en strafvorderlijke gegevens, het Besluit politiegegevens, het Besluit controle op rechtspersonen, het Besluit omgevingsrecht, het Besluit strategische goederen en het Subsidiebesluit Ministerie van Buitenlandse Zaken in verband met de Evaluatie- en uitbreidingswet Bibob (Verzamelbesluit evaluatie en uitbreiding Wet Bibob). Sdu Uitgevers, Den Haag.
- Stb 2013-207. Staatsblad van het Koninkrijk der Nederlanden jaargang 2013 nr 207 (2013). Besluit van 31 mei 2013, houdende wijziging van lijst I, behorende bij de Opiumwet, in verband met plaatsing op deze lijst van 4-methylamfetamine (4-MA). Sdu Uitgevers, Den Haag.
- Stb 2013-380. Staatsblad van het Koninkrijk der Nederlanden jaargang 2013 nr 380 (2013). Wet van 1 oktober 2013, houdende wijziging van de Drank- en Horecawet teneinde enkele leeftijdsgrenzen te verhogen van 16 naar 18 jaar en de preventie en handhaving te verankeren. Sdu Uitgevers, Den Haag.
- Stc 2011-11134. Staatscourant van 27 juni 2011, nr.1. (2011). Aanwijzing Opiumwet. Sdu Uitgevers, Den Haag.
- Stc 2011-13125. Staatscourant van 21 juli 2011, nr.1. (2011). Voorstel van wet tot wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepteelt. Sdu Uitgevers, Den Haag.
- Stc 2011-13125. Staatscourant van 21 juli 2011, nr.1. (2011). Voorstel van wet tot wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepteelt. Sdu Uitgevers, Den Haag.
- Stc 2011-22936. Staatscourant van 27 december 2011, nr.2. (2012). Aanwijzing Opiumwet. Sdu Uitgevers, Den Haag.
- Stc 2012-12249. Staatscourant van 14 juni 2012 nr.12249 (2012). Regeling van de Minister van Volksgezondheid, Welzijn en Sport, van 13 juni 2012, nr. VGP/3119055, houdende plaatsing van het middel 4-methylamfetamine op lijst I van de Opiumwet. Sdu Uitgevers, Den Haag.
- Stc 2012-26938. Staatscourant van 24 december 2012 nr.26938 (2012). Aanwijzing Opiumwet. Sdu Uitgevers, Den Haag.
- Stc 2012-8299.Staatscourant van 27 april 2012, nr.8. (2012). Aanwijzing OM-afdoening. Sdu Uitgevers, Den Haag.
- Stc 2013-26229. Staatscourant van 23 september 2013 nr.26229 (2013). Besluit van de Minister van Volksgezondheid, Welzijn en Sport van 1 september 2013, 121748-104686, houdende vaststelling van een beleidskader voor subsidiëring van anonieme e-mental health 2014. Sdu Uitgevers, Den Haag.
- Stc 2013-35061.Staatscourant van 17 december 2013 nr.35061 (2013). Richtlijn voor Strafvordering bij meerderjarige veelplegers (in het bijzonder de vordering van de ISD-maatregel bij stelselmatige daders) [2013R017]. Sdu Uitgevers, Den Haag
- Stollenga, M. (2013). Redactioneel. Verslaving 9, (4), 2-4
- Stollenga, M., De Haan, G., and De Goede, J. (2013). Naar duurzaam herstel: Is De Skuul richtinggevend voor de verslavingszorg? <u>Verslaving</u> **9**, (4), 67-80
- T.K.24077-259.Tweede Kamer der Staten Generaal vergaderjaar 2010-2011 publicatienummer 24077 nr.259 (2011). Drugbeleid; Brief regering; Drugsbeleid. Sdu Uitgevers, Den Haag.

- T.K.24077-265.Tweede Kamer der Staten Generaal vergaderjaar 2011-2012 publicatienummer 24077 nr.265 (2011). Drugbeleid; Brief regering; Aanscherping gedoogcriteria coffeeshops. Sdu Uitgevers, Den Haag.
- T.K.24077-267.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012 publicatienummer 24077 nr.267 (2012). Drugbeleid; Brief regering; Aanscherping gedoogcriteria coffeeshops. Sdu Uitgevers, Den Haag.
- T.K.24077-286.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012 publicatienummer 24077 nr.286 (2012). Drugbeleid; Brief regering; Informatie over actuele zaken inzake het Coffeeshopbeleid. Sdu Uitgevers, Den Haag.
- T.K.24077-287.Tweede Kamer der Staten-Generaal vergadrjaar 2011-2012 publicatienummer 24077 nr 287 (2012). Drugbeleid; Brief regering; Effecten invoering aangescherpt coffeeshopbeleid. Sdu Uitgevers, Den Haag.
- T.K.24077-288.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012 publicatienummer 24077 nr.288 (2012). Drugbeleid; Brief regering; Toezeggingen drugsdebat van 1 en 28 maart 2012 en over nog openstaande toezegging uit het Algemeen Overleg Georganiseerde Criminaliteit. Sdu Uitgevers, Den Haag.
- T.K.24077-289.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012 publicatienummer 24077 nr.289 (2012). Drugbeleid; Brief regering; Reactie op informatieverzoek van de vaste Kamercommissie Veiligheid en Justitie over evaluatie clubpas. Sdu Uitgevers, Den Haag.
- T.K.24077-291.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012 publicatienummer 24077 nr.291 (2012). Drugbeleid; Brief regering; Reactie op het verzoek van het lid Berndsen om een debat met betrekking tot de weerstand die er is tegen algemene invoering van de 'wietpas'. Sdu Uitgevers, Den Haag.
- T.K.24077-293.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 24077 nr.293 (2012). Drugbeleid; Brief regering; Reactie op verzoek Berndsen-Jansen over het coffeeshopbeleid en de toegenomen straatoverlast en drugshandel als gevolg van de invoering van de wietpas in Limburg, Noord-Brabant en Zeeland. Sdu Uitgevers, Den Haag.
- T.K.24077-295.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 24077 nr.295 (2012). Drugbeleid; Brief regering; Inventarisatie drugshandel via het internet. Sdu Uitgevers, Den Haag.
- T.K.24077-301.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 24077 nr.301 (2013). <u>Drugbeleid; Motie; Motie van het lid Van Tongeren over het lokale coffeeshopbeleid</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-302.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 24077 nr.302 (2013). <u>Drugbeleid; Motie; Motie van het lid Van Tongeren over een experiment inzake de lokale wietbehoefte</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-307.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatinummer 24077 nr.30 (2013). Drugbeleid; Verslag van een algemeen overleg; Verslag van een algemeen overleg, gehouden op 13 december 2012, inzake Clubpas. Sdu Uitgevers, Den Haag.
- T.K.24077-308.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 24077 nr.308 (2013). Drugbeleid; Brief regering; Reactie op het DSW-rapport inzake verslavingszorg. Sdu Uitgevers, Den Haag.
- T.K.24077-311.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 24077 nr.311 (2013). Drugbeleid; Brief regering; Stand van zaken toezeggingen gedaan tijdens het dertigledendebat over de blijvende sleutelrol van Nederland in de drugshandel op 16 april 2013. Sdu Uitgevers, Den Haag.
- T.K.24077-312.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 24077 nr.312 (2013). Drugbeleid; Verslag van een algemeen overleg; Verslag van een algemeen overleg, gehouden op 3 juli 2013, over Coffeeshopbeleid. Sdu Uitgevers, Den Haag.

- T.K.24077-318.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 24077 nr.318 (2014). <u>Drugbeleid; Brief regering; Informatierapport sclerotia Coördinatiepunt Assessment en Monitoring nieuwe drugs (CAM)</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-321.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 24077 nr 321 (2014). <u>Drugbeleid</u>; <u>Brief regering</u>; <u>Toezeggingen ter zake het Algemeen Overleg Coffeeshopbeleid over de aanpak van hennepteelt</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-323.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.323 (2014). <u>Drugbeleid; Motie; Motie van de leden Berndsen-Jansen en Van Nispen over een proef met gereguleerde en gecertificeerde hennepteelt ten behoeve van coffeeshops.</u> Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-324.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.324 (2014). <u>Drugbeleid; Motie; Motie van de leden Berndsen-Jansen en Van Nispen over aanvullend onderzoek naar de internationale ruimte voor het legaliseren, decriminaliseren, beleidsmatig gedogen en/of anderszins reguleren van cannabisteelt. Tweede Kamer der Staten-Generaal, Den Haag</u>
- T.K.24077-325.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.325 (2014). <u>Drugbeleid; Motie; Motie van het lid Van Tongeren over de in een gerechtelijke uitspraak vervatte voorwaarden verwerken tot een beleidsregel</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-326.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.326 (2014). <u>Drugbeleid; Motie; Motie van de leden Van der Staaij c.s. over er bij gemeenten op aandringen dat zij een handhavende instantie aanwijzen en ook daadwerkelijk handhaven.</u> Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-327.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.327 (2014). <u>Drugbeleid; Motie; Motie van de leden Van der Staaij en Oskam over bevorderen dat gemeenten extra maatregelen nemen om drugstoerisme tegen te gaan.</u>
  Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-329.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.329 (2014). <u>Drugbeleid; Motie; Motie van het lid Van Nispen c.s. over afschaffen van het ingezetenencriterium</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-330.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.330 (2014). <u>Drugbeleid; Motie; Motie van het lid Van Nispen c.s. over onderzoek naar de effecten van regulering</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-331.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.331 (2014). <u>Drugbeleid; Motie; Motie van het lid Helder c.s. over zorgen dat gemeenten die coffeeshops binnen hun grondgebied hebben het ingezetenencriterium in hun beleid opnemen.</u> Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-332.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.332 (2014). <u>Drugbeleid; Motie; Motie van het lid Helder over instellen van een drugsautoriteit ten behoeve van de ontwikkeling en handhaving van het drugsbeleid</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-333.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.333 (2014). <u>Drugbeleid; Brief regering; Gevolgen van het nieuwe drugsbeleid in België in Nederlandse grensregio's</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.24077-336.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24077 nr.336 (2014). <u>Drugbeleid; Verslag van een algemeen overleg; Verslag van een algemeen overleg, gehouden op 16 oktober 2014, over Coffeeshopbeleid (tweede termijn)</u>. Tweede Kamer der Staten-Generaal, Den Haag

- T.K.24587-607.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 24587 nr.607 (2014). <u>Justitiële Inrichtingen; Brief regering; Beklagrecht van gedetineerden, het aantal isolatieplaatsingen in verband met het weigeren van plaatsing in een meerpersoonscel (MPC) en de verslavingszorg binnen het gevangeniswezen.</u> Tweede Kamer der Staten-Generaal, Den Haag
- T.K.28684-385.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 28684 nr.385 (2013). Naar een veiliger samenleving; Motie; Motie van het lid Helder over het opleggen van de ISD-maatregel aan jeugdigen vanaf 12 jaar. Sdu Uitgevers, Den Haag.
- T.K.28741-19.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012 publicatienummer 28741 nr.19 (2012). Jeugdcriminaliteit; Brief regering; Voortgang adolescentenstrafrecht. Sdu Uitgevers, Den Haag.
- T.K.29270-69.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012 publicatienummer 29270 nr.69 (2012). Reclasseringsbeleid; Verslag van een algemeen overleg; Verslag van een algemeen overleg, gehouden op 13 juni 2012, inzake reclassering. Sdu Uitgevers, Den Haag.
- T.K.29350-10: Tweede Kamer der Staten-Generaal vergaderjaar 2010-2011 publicatienummer 29350 nr.10 (2011). ICT bij politie: rapport 2010. Sdu Uitgevers, Den Haag.
- T.K.29628-269.Tweede Kamer der Staten-Generaal vergaderjaar 2011-2012 publicatienummer 29628 nr.269 (2011). Aanvalsprogramma Informatievoorziening Politie 2011-2014: continuïteit, verbetering en vernieuwing [Bijlage]. Sdu Uitgevers, Den Haag.
- T.K.29628-421.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 29628 nr.421 (2013). Politie; Brief regering; Stand van zaken vorming nationale politie. Sdu Uitgevers, Den Haag
- T.K.29911-79.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 29911 nr.79 (2013). Bestrijding georganiseerde criminaliteit; Brief regering; Nationaal Dreigingsbeeld Georganiseerde Criminaliteit 2012 en Vierde rapportage op basis van de Monitor Georganiseerde Criminaliteit. Sdu Uitgevers, Den Haag.
- T.K.29911-84.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 29911 nr.84 (2013). Bestrijding georganiseerde criminaliteit; Brief regering; Resultaten bestrijding georganiseerde criminaliteit. Sdu Uitgevers, Den Haag.
- T.K.29911-91.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 29911 nr.91 (2014). <u>Bestrijding georganiseerde criminaliteit; Brief regering; Uitkomst van het overleg met de burgemeester van Uden over het sluiten van drugslabs</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.29911-93.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 29911 nr.93 (2014). <u>Bestrijding georganiseerde criminaliteit</u>; <u>Brief regering</u>; <u>Intensivering aanpak ondermijnende en georganiseerde criminaliteit Zuid-Nederland</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.31110-13.Tweede kamer der Staten-Generaal vergaderjaar 2011-2012 publicatienummer 31110 nr.13 (2013). Justitieel Verslavingsbeleid; Brief regering; Effecten ISD-maatregel. Sdu Uitgvers, Den Haag.
- T.K.31110-16.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 31110 nr.16 (2014). <u>Justitieel Verslavingsbeleid; Brief regering; Aanbieding onderzoeksrapporten over de maatregel Inrichting Stelselmatige Daders</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.31110-17.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 31110 nr.17 (2014). <u>Justitieel Verslavingsbeleid; Brief regering; Eindrapportage onderzoek verkenning uitvoeringspraktijk</u>. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.31316-3.Tweede Kamer der Staten-Generaal vergaderjaar 2007-2008 publicatienummer 31316 nr.3 (2008). Bepalingen over de zorg voor de publieke gezondheid (Wet publieke gezondheid). Sdu Uitgevers, Den Haag.

- T.K.32398-3.Tweede Kamer der Staten-Generaal vergaderjaar 2009-2010 publicatienummer 32398 nr.3 (2010). Vaststelling van een Wet forensische zorg en daarmee verband houdende wijzigingen in diverse andere wetten (Wet forensische zorg); Memorie van toelichting. Sdu Uitgevers, Den Haag.
- T.K.32793-2.Tweede Kamer der Staten Generaal vergaderjaar 2010-2011 publicatienummer 32793 nr.2 (2011). Preventief Gezondheidsbeleid: Nota Gezondheid Dichtbij: Landelijke nota gezondheidsbeleid. Sdu Uitgevers, Den Haag.
- T.K.32842-2.Tweede Kamer der Staten-Generaal vergaderjaar 2010-2011 publicatienummer 32842 nr.2 (2011). Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepteelt; Voorstel van wet. Sdu Uitgevers, Den Haag.
- T.K.32842-3.Tweede Kamer der Staten-Generaal vergaderjaar 2010-2011 publicatienummer 32842 nr.3 (2011). Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepteelt; Memorie van toelichting. Sdu Uitgevers, Den Haag.
- T.K.32859-16.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 32859 nr.16 (2014). Wijziging van de Wegenverkeerswet 1994 in verband met het verbeteren van de aanpak van het rijden onder invloed van drugs; Brief regering; Aanbieding rapport

  "Analytische grenswaarden voor drugs" bij het wetsvoorstel houdende wijziging van de Wegenverkeerswet 1994 in verband met het verbeteren van de aanpak van het rijden onder invloed van drugs. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.32859-9.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 32859 nr.9 (2013). Wijziging van de Wegenverkeerswet 1994 in verband met het verbeteren van de aanpak van het rijden onder invloed van drugs; Verslag (nader, tweede nader etc.); Nader verslag. Sdu Uitgevers, Den Haag.
- T.K.33593-3.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 33593 nr.3 (2014). Besluit, houdende wijziging van lijst I, behorende bij de Opiumwet, in verband met plaatsing op deze lijst van hasjiesj en hennep met een gehalte aan tetrahydrocannabinol (THC) van 15 procent of meer; Verslag van een schriftelijk overleg; Verslag van een schriftelijk overleg over het Besluit, houdende wijziging van lijst I, behorende bij de Opiumwet, in verband met plaatsing op deze lijst van hasjiesj en hennep met een gehalte aan tetrahydrocannabinol (THC) van 15 procent of meer. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.33593-4.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 publicatienummer 33593 nr.4 (2014). Besluit, houdende wijziging van lijst I, behorende bij de Opiumwet, in verband met plaatsing op deze lijst van hasjiesj en hennep met een gehalte aan tetrahydrocannabinol (THC) van 15 procent of meer; Verslag van een hoorzitting / rondetafelgesprek; Verslag van een rondetafelgesprek, gehouden op 6 oktober 2014, over het Ontwerpbesluit houdende wijziging van lijst I, behorende bij de Opiumwet in verband met plaatsing op deze lijst van hasjiesj en hennep met een gehalte aan tetrahydrocannabinol (THC) van 15 procent of meer (herdruk). Tweede Kamer der Staten-Generaal, Den Haag
- T.K.33675-3.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 publicatienummer 33675 nr.3 (2013). Wijziging van de Zorgverzekeringswet, de Algemene Wet Bijzondere Ziektekosten en enkele andere wetten teneinde de bekostiging van anonieme e-mental health structureel te regelen en de anonieme financiering van zorg aan ernstig bedreigde cliënten mogelijk te maken; Memorie van toelichting. Sdu Uitgevers, Den Haag.
- T.K.33738-2.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 33738 nr.2 (2013). Wijziging van de Tabakswet ter invoering van een verhoogd strafmaximum op overtreding van het rookverbod (Verhoging strafmaximum overtreding rookverbod Tabakswet); Voorstel van wet; Voorstel van wet. Sdu Uitgevers, Den Haag.

- T.K.33799-3.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 publicatienummer 33799 nr.3 (2014). Wijziging van het Wetboek van Strafvordering in verband met het terugdringen van geweld onder invloed van middelen; Memorie van toelichting: Memorie van toelichting. Tweede Kamer der Staten-Generaal, Den Haag
- T.K.Aanhangsel -1136.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 Aanhangsel van de Handelingen nr.1136 (2013). Vragen van het lid Van Veen (VVD) aan de minister van Volksgezondheid, Welzijn en Sport over het artikel «verslavingszorg zelf ontspoord» (ingezonden 23 november 2012). Antwoord van minister Schippers (Volksgezondheid, Welzijn en Sport) (ontvangen 30 januari 2013). Sdu Uitgevers, Den Haag.
- T.K.Aanhangsel-1050.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 Aanhangsel van Handelingen nr.1050 (2014). <u>Vragen van het lid Rebel (PvdA) aan de Minister van Volksgezondheid, Welzijn en Sport over de toename van het aantal drugsslachtoffers bij ziekenhuizen (ingezonden 5 december 2013).</u>

  Antwoord van Staatssecretaris Van Rijn (Volksgezondheid, Welzijn en Sport) (ontvangen 28 januari 2014). Tweede Kamer der Staten-Generaal, Den Haag
- T.K.Aanhangsel-1189.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 Aanhangsel van de Handelingen nr.1189 (2013). Vragen van het lid Van der Steur (VVD) aan de minister van Veiligheid en Justitie over een uitzending van Omroep Brabant over drugssmokkel via de Antwerpse Haven (ingezonden 9 januari 2013).
  Antwoord van minister Opstelten (Veiligheid en Justitie) (ontvangen 1 februari 2013). Sdu Uitgevers, Den Haag.
- T.K.Aanhangsel-2427.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 Aanhangsel van de Handelingen nr.2427 (2014). <u>Vragen van het lid Rebel (PvdA) aan de Minister van Veiligheid en Justitie en de Staatssecretaris van Volksgezondheid, Welzijn en Sport over online drugs kopen (ingezonden 16 april 2014).</u>

  Antwoord van Minister Opstelten (Veiligheid en Justitie), mede namens de Staatssecretaris van Volksgezondheid, Welzijn en Sport (ontvangen 3 juli 2014). Tweede Kamer der Staten-Generaal, Den Haag
- T.K.Aanhangsel-2463.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 Aanhangsel van de Handelingen nr.2463 (2013). Vragen van het lid Oskam (CDA) aan de ministers van Veiligheid en Justitie, van Volksgezondheid, Welzijn en Sport en van Economische Zaken over het bericht dat criminelen in toenemende mate apaan gebruiken als grondstof voor de productie van synthetische harddrugs (ingezonden 26 april 2013). Antwoord van minister Opstelten (Veiligheid en Justitie), mede namens de staatssecretaris van Volksgezondheid, Welzijn en Sport) (ontvangen 5 juni 2013). Sdu Uitgevers, Den Haag.
- T.K.Aanhangsel-2549.Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 Aanhangsel van de Handelingen nr.2549 (2013). Vragen van het lid Van der Staaij (SGP) aan de minister van Veiligheid en Justitie over het gedogen van qat-gebruik (ingezonden 16 april 2013). Antwoord van minister Opstelten (Veiligheid en Justitie) (ontvangen 29 mei 2013). Sdu Uitgevers, Den Haag.
- T.K.Aanhangsel-282.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 Aanhangsel van de Handelingen nr.28 (2014). <u>Vragen van het lid Rebel (PvdA) aan de Minister van Veiligheid en Justitie over online drugswinkels (ingezonden 2 oktober 2014).</u>

  <u>Antwoord van Minister Opstelten (Veiligheid en Justitie) (ontvangen 17 oktober 2014).</u>

  Tweede Kamer der Staten-Generaal, Den Haag
- T.K.Aanhangsel-408.Tweede Kamer der Staten-Generaal vergaderjaar 2014-2015 Aanhangsel van de Handelingen nr.408 (2014). Antwoord op vragen van de leden Kooiman en Van Nispen over diverse ontwikkelingen en reorganisaties in de strafrechtketen en de gevolgen hiervan voor de bestrijding van georganiseerde criminaliteit. Tweede Kamer der Staten-Generaal, Den Haag

- T.K.Aanhangsel-78.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 Aanhangsel van de Handelingen nr.78 (2013). Vragen van het lid Van Tongeren (GroenLinks) aan de minister van Veiligheid en Justitie en de staatssecretaris van Volksgezondheid, Welzijn en Sport over de uitkomst van de consultaties over de 15% THC-norm voor cannabis (ingezonden 20 augustus 2013). Antwoord van minister Opstelten (Veiligheid en Justitie) mede namens de staatssecretaris van Volksgezondheid, Welzijn en Sport (ontvangen 20 september 2013). Sdu Uitgevers, Den Haag.
- T.K.Handelingen 2011-2012-69. Tweede Kamer der Staten Generaal vergaderjaar 2011-2012, v.6.2.m.2.p.p. (2012). Voortzetting van het debat over de hoofdlijnen drugsbeleid. Sdu Uitgevers, Den Haag.
- T.K.Handelingen 2012-2013, 41-8.Tweede Kamer der .Staten.-Generaal. vergaderjaar 2012-2013 vergaderingnummer 41-8,11 maart 2013,pag.41-48 (2013). Debat naar aanleiding van een algemeen overleg op 13 december 2012 over de clubpas. Sdu Uitgevers, Den Haag.
- T.K.Handelingen 2012-2013, 60-9. Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 vergaderingsnummer 60-9,24 mei 2013,pag.17-22 (2013). Regeling van werkzaamheden. Sdu Uitgever, Den Haag.
- T.K.Handelingen 2012-2013, 67-9. Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013,vergadernummer 67-9,27 maart 2013,pag 24-42. (2013). Voortzetting van de behandeling van het wetsvoorstel Wijziging van de Opiumwet in verband met de strafbaarstelling van handelingen ter voorbereiding of vergemakkelijking van illegale hennepteelt ( 32842 ). Sdu Uitgevers, Den Haag.
- T.K.Handelingen 2012-2013, 89-4. Tweede Kamer der Staten-Generaal vergaderjaar 2012-2013 vergaderingsnummer 89,5 juli 2012,pag.4-30 (2013). Voortzetting van de behandeling van het wetsvoorstel Wijziging van het Wetboek van Strafrecht, het Wetboek van Strafvordering en enige andere wetten in verband met de invoering van een adolescentenstrafrecht. Sdu Uitgevers, Den Haag.
- T.K.Handelingen 2013-2014, 94-28.Tweede Kamer der Staten-Generaal vergaderjaar 2013-2014 vergadernummer 94-28,17 juni 2014 (2014). Wijziging Wegenverkeerswet 1994. Tweede Kamer der Staten-Generaal, Den Haag
- Termorshuizen, F., Van Bergen, A.P.L., Smit, R.B.J., Smeets, H.M., and Van Ameijden, E.J.C. (2014). Mortality and psychiatric disorders among public mental health care clients in Utrecht: A register-based cohort study. <u>International Journal of Social Psychiatry</u> **60**, (5), 426-435
- Tollenaar, N. and Van der Laan, A.M. (2012). Effecten van de ISD-maatregel: factsheet 2012-1. WODC, Den Haag.
- Tollenaar, N. and Van der Laan, A.M. (2013). Monitor veelplegers 2013: trends in de populatie zeer actieve veelplegers uit de periode 2003-2010. WODC, Den Haag.
- Tollenaar, N., Van der Laan, A.M., and Beijersbergen, K.A. (2014). <u>Korte- en langetermijneffecten van de ISD-maatregel</u>. WODC, Den Haag
- Tollenaar, N., Van der Laan, A.M., and Van der Heijden, P.G.M. (2014). Effectiveness of a prolonged incarceration and rehabilitation measure for high-frequency offenders. <u>Journal of Experimental Criminology</u> **10**, (1), 29-58
- Trienekens, S.C.M., Koedijk, F.D.H., Van den Broek, I.V.F., Vriend, H.J., Op de Coul, E.L.M., Van Veen, M.G. et al. (2012). Sexually transmitted infections, including HIV, in the Netherlands in 2011. RIVM, Bilthoven.
- Trimbos Institute, projectteam uitgaan alcohol en drugs, 2013. Opwindingsdelier factsheet voor politie. Utrecht: Trimbos Institute.
- Tuithof, M., Ten Have, M., van, D.S., and de, G.R. (2014). Prevalentie, persistentie en gevolgen van ADHD in de Nederlandse volwassen bevolking. <u>Tijdschr Psychiatr</u> **56**, (1), 10-19

- Tuynman, M. and Planije, M. (2013). <u>Monitor Plan van Aanpak Maatschappelijke Opvang:</u>
  <u>Rapportage 2012: Amsterdam, Rotterdam, Den Haag en Utrecht</u>. Trimbos-instituut, Utrecht
- Tuynman, M., and Planije, M. (2012). Monitor Plan van Aanpak Maatschappelijke Opvang: Rapportage 2011: Amsterdam, Rotterdam, Den Haag en Utrecht. Trimbos-instituut, Utrecht.
- Tuynman, M., Muusse, C., and Planije, M. (2013). Opvang landelijk toegankelijk? Onderzoek naar regiobinding en landelijke toegankelijkheid van de maatschappelijke opvang. Trimbosinstituut, Utrecht.
- Van Amsterdam JGC, Brunt TM, McMaster MTB, Niesink R, van Noorden MS, and Van den Brink W. (2012). Cognitieve schade door intensief gebruik en overdoses van GHB. T Psychiatrie 54 (12): 1001-1010.
- Van de Glind G. 2013. ADHD in treatment seeking patients with a substance use disorder. Amsterdam: University of Amsterdam. PhD thesis.
- Van de Glind, G., Van den Brink, W., Koeter, M.W., Carpentier, P.J., van Emmerik-van, O.K., Kaye, S. et al. (2013). Validity of the Adult ADHD Self-Report Scale (ASRS) as a screener for adult ADHD in treatment seeking substance use disorder patients. Drug Alcohol Depend 132, (3), 587-596.
- Van den Berg CHSB, Nanlohy NM, Van de Laar TJW, Prins M, and Van Baarle D.(2013). Ongoing risk behavior and the presence of HCV-RNA affect the hepatitis C virus (HCV-) specific CD4+ T cell response. Viral Immunology, 26: 216-219.
- Van der Giessen, M., Moolenaar, D.E.G., and Van Ooyen-Houben, M. (2014). <u>De export van in Nederland geteelde cannabis: een schatting van de omvang en een bespreking van de mogelijkheden en beperkingen van het onderzoek</u>. WODC/Ministerie van Veiligheid en Justitie, Den Haag
- Van der Knaap, N., Grady, B.P., Schim van der Loeff MF, Heijman, T., Speksnijder, A., Geskus, R. et al. (2013). Drug users in Amsterdam: are they still at risk for HIV? <u>PLoS ONE</u> **8**, (3), e59125
- Van der Kolk, S. and Knoops, L. (2014). <u>Middelengebruik mannelijke en transgender sekswerkers</u>. Mainline, Amsterdam
- Van der Laan, F. (2012). Criminaliteitsbeeldanalyse 2012: Cocaïne. KLPD/DNR, Driebergen.
- Van der Pol, P. (2014). The dynamics of cannabis use and dependence. Universiteit van Amsterdam, Amsterdam (hoofdstuk 5).
- Van der Pol, P., Liebregts, N., Brunt, T., Van Amsterdam, J., De Graaf,R., Korf, D.J., Van den Brink, W., and Van Laar,M. (2014a) Cross-sectional and prospective relation of cannabis potency, dosing and smoking behaviour with cannabis dependence: an ecological study. Addiction 109, (7), 1101-1109.
- Van der Pol, P., Liebregts, N., De Graaf,R., Korf, D.J., Van den Brink, W., and Van Laar,M. (2011). The Dutch Cannabis Dependence (CanDep) study on the course of frequent cannabis use and dependence: objectives, methods and sample characteristics. Int J Methods Psychiatr Res 20, (3), 169-181.
- Van der Pol, P., Liebregts, N., De Graaf,R., Korf, D.J., Van den Brink, W., and Van Laar,M. (2013b). Facilitators and barriers in treatment seeking for cannabis dependence. Drug Alcohol Depend 133, (2), 776-780.
- Van der Pol, P., Liebregts, N., De Graaf, R., Korf, D.J., Van den Brink, W., and Van Laar, M. (2013c). Predicting the transition from frequent cannabis use to cannabis dependence: A three-year prospective study. Drug Alcohol Depend 133, (2), 352-359.
- Van der Pol, P., Liebregts, N., De Graaf,R., Korf, D.J., Van den Brink, W., and Van Laar,M. (2013d). Reliability and validity of the Severity of Dependence Scale for detecting cannabis dependence in frequent cannabis users. Int J Methods Psychiatr Res 22, (2), 138-143.

- Van der Pol, P., Liebregts, N., De Graaf,R., Korf, D.J., Van den Brink, W., and Van Laar,M. (2013e). Validation of self-reported cannabis dose and potency: an ecological study. Addiction 108, (10), 1801-1808.
- Van der Pol, P., Liebregts, N., De Graaf,R., Ten Have,M., Korf, D.J., Van den Brink, W. et al. (2013a). Mental health differences between frequent cannabis users with and without dependence and the general population. Addiction 108, (8), 1459-1469.
- Van der Stel, J. (2013). Innovatie rond herstel. Verslaving 9, (4), 5-18
- Van der Stel, J. and Van Gool, R. (2013). Quick Scan: Resultaten scoren rond herstel. Resultaten Scoren, Haarlem/Sassenheim.
- Van der Torre, E.J., Holvast, R., Keijzer, D., Beke, B., and Bik, J. (2013). Het nieuwe coffeeshopbeleid: een overzichtelijke tussenbalans in Maastricht. Politieacademie/LokaleZaken/Beke Advies, Apeldoorn.
- Van der Torre, E.J., Schaap, L., Beke, B., Bervoets, E., Gieling, M., and Keijzer, D. (2012). Tilburgse taferelen: de eerste rapportage: drugsmonitor Midden en West Brabant & Zeeland. Politieacademie/LokaleZaken/Beke Advies, Apeldoorn.
- Van Dijken GD, Blom RE, Hené RJ, Boer WH. High incidence of mild hyponatraemia in females using ecstasy at a rave party. Nephrol Dial Transplant 2013; 28:2277-2283.
- Van Dijken, G.D., Blom, R.E., Hene, R.J., Boer, W.H., and NIGRAM Consortium (2013). High incidence of mild hyponatraemia in females using ecstasy at a rave party. Nephrol Dial.Transplant 28, (9), 2277-2283.
- Van Dongen, T., Selleslaghs, J., and Gehem, M. (2013). Detecting elusive criminals: research for tackling europe's grand challenge of transnational organized crime. The Hague Centre for Strategic Studies/TNO, Den Haag.
- Van Duijvenbooden, K. and Plattje, W. (2010). Stand van zaken Implementatie Samenwerkingsmodel Nazorg binnen het Gevangeniswezen en binnen gemeenten. Ministerie van Justitie/VNG, Den Haag.
- Van Emmerik-Van Oortmerssen, K., Van de Glind, G., Koeter, M.W., Allsop, S., Auriacombe, M., Barta, C. et al. (2014). Psychiatric comorbidity in treatment-seeking substance use disorder patients with and without attention deficit hyperactivity disorder: results of the IASP study. <a href="Addiction 109">Addiction 109</a>, (2), 262-272
- Van Ewijk, C., Van der Horst, A., and Besseling, P. (2013). Toekomst voor de zorg: gezondheid loont: tussen keuze en solidariteit. Centraal Planbureau, Den Haag.
- Van Laar, M., Cruts, G., Van Ooyen-Houben, M., Meije, D., Croes, E., Meijer, R. et al. (2013). The Netherlands drug situation 2012: report to the EMCDDA by the Reitox National Focal Point. Trimbos-instituut/WODC, Utrecht/Den Haag.
- Van Laar, M., Frijns, T., Trautmann, F., and Lombi, L. (2013). Sizing the cannabis market: a demandside and user-specific approach in seven European countries. <u>Curr Drug Abuse Rev</u> **6**, (2), 152-164
- Van Laar, M., Trautmann, F., and Frijns, T. (2013). Drugs market: an assessment from the demand side: introduction, In Further insights into aspects of the EU illicit drugs market.F. Trautmann, B Kilmer, and P Turnbull, (eds.), pp. 57-72. Publications Office of the European Union, Luxembourg.
- Van Laar, M.W., Cruts, A.A.N., Van Ooyen-Houben, M.M.J., Meijer, R.F., Croes, E.A., Ketelaars, A.P.M., Verdurmen, J.E.E., Brunt, T., and Sheikh-Alibaks, R. (Eds.) (2013). Nationale Drug Monitor: Jaarbericht 2012 [Netherlands National Drug Monitor: Annual Report 2012]. Trimbosinstituut, Netherlands Institute of Mental Health and Addiction, Utrecht, the Netherlands.
- Van Laar, M.W., Van Ooyen-Houben, M.M.J., Cruts, A.A.N., Meijer, R.F., Croes, E.A., Ketelaars, A.P.M. et al. (2014). Nationale Drug Monitor; Jaarbericht 2013/2014. Trimbosinstituut/WODC, Utrecht/Den Haag

- Van Ooyen-Houben, B Bieleman, and D Korf, (eds.), pp. 131-151. WODC, Den Haag.
- Van Ooyen-Houben, M. and Van der Giessen, M. (2014). De implementatie van het Ingezetenencriterium volgens de betrokken actoren, In <u>Coffeeshops, toeristen en lokale markt: evaluatie van het Besloten club- en het Ingezetenencriterium voor coffeeshops: eindrapport.</u>M. Van Ooyen-Houben, B Bieleman, and D J Korf, (eds.), pp. 49-78. WODC, Den Haag
- Van Ooyen-Houben, M., Bieleman, B., and Korf, D.J. (2014). <u>Coffeeshops, toeristen en lokale markt:</u> <u>evaluatie van het Besloten club- en het Ingezetenencriterium voor coffeeshops: eindrapport.</u> WODC, Den Haag
- Van Ooyen-Houben, M.M.J. and Van der Giessen, M. (2013). De implementatie van de B- en I-criteria volgens betrokken actoren: resultaten van de procesevaluatie, In Het Besloten club- en het Ingezetenencriterium voor coffeeshops: evaluatie van de implementatie en de uitkomsten in de periode mei-november 2012: tussenrapportage.M. Van Ooyen-Houben, B Bieleman, and D Korf, (eds.), pp. 77-106. WODC, Den Haag.
- Van Ooyen-Houben, M.M.J., Bieleman, B., and Korf, D.J. (2013). Het Besloten club- en het Ingezetenencriterium voor coffeeshops: evaluatie van de implementatie en de uitkomsten in de periode mei-november 2012: tussenrapportage. WODC, Den Haag.
- Van Rijs, W. (2014). Beddenafbouw GGZ moet geleidelijk gaan. GGZ Nederland, Amersfoort
- Van Santen, D.K., van der Helm, J.J., Grady, B.P., de Vos, A.S., Kretzschmar, M.E., Stolte, I.G. et al. (2014). Temporal trends in mortality among people who use drugs compared with the general Dutch population differ by hepatitis C virus and HIV infection status. <u>AIDS</u>
- Van Sighem A, Smit C, Holman R, Gras L, Stolte I, Bezemer D, De Wolf F, on behalf of the Netherlands collaborative HIV treatment centres (2012). Monitoring report 2012. Human Immunodeficiency virus (HIV) infection in the Netherlands. Amsterdam: HIV Monitoring Foundation.
- Van Sighem, A., Smit, C., Gras, L., Holman, R., Stolte, I., Prins, M. et al. (2011). Monitoring Report 2011: Human Immunodeficiency Virus (HIV) Infection in the Netherlands. Stichting HIV Monitoring, Amsterdam.
- Van Straaten, B., Van der Laan, J., Rodenburg, G., Boersma, S., Wolf, J., and Van de Mheen, D. (2014). <u>Dakloze mensen in de vier grote steden: veranderingen in leefsituatie, zorggebruik en kwaliteit van leven</u>. IVO, Rotterdam
- Van Straaten, B., Van der Laan, J., Schrijvers, C., Boersma, S., Maas, M., Wolf, J. et al. (2014).

  Middelengebruik en psychische klachten van daklozen in de vier grote steden. Verslaving 10, (1), 19-36
- Van Zutphen, F., Goderie, M., and Janssen, J. (2014). <u>De Maatregel Inrichting Stelselmatige Daders</u>
  (ISD): maatschappelijke kosten-batenanalyse van een eventuele verlenging: eindrapport. Van Zutphen Economisch Advies, Rotterdam
- Vander Laenen, F., Colman, C., and Smet, V. (2014). 'Eerst ben ik gestopt met drugsgebruik':

  Desistance versus proces van herstel bij drugsgebruikende delinquenten. <u>Verslaving</u> **9**, (4), 19-30
- Veiligheidshuizen (2013). Landelijk kader Veiligheidshuizen; Vóór en dóór partners. Ministerie van Veiligheid en Justitie, Den Haag.
- Verdurmen, J., Monshouwer, K., Van Dorsselaer, S., Vermeulen, E., Lokman, S., and Vollebergh, W. (2012). Jeugd en riskant gedrag 2011: kerngegevens uit het Peilstationsonderzoek scholieren: roken, drinken, drugsgebruik en gokken onder scholieren vanaf tien jaar. Trimbosinstituut, Utrecht.
- Vermeulen-Smit, E., Kepper, A., and Monshouwer, K. (2014). <u>Preventie van problematisch genotmiddelengebruik onder jongeren in risicosettingen</u>. Trimbos-instituut, Utrecht
- Vogels, N. and Croes, E. (2013). Monitor Drugs Incidenten: factsheet 2012. Trimbos-instituut, Utrecht.

- Voorham L and Van Hasselt N. Geweld onder invloed beïnvloeden. Factsheet 2013. Utrecht: Trimbos-Institute.
- Vriend HJ, Veen MG van, Prins M, Urbanus AT, Boot HJ, Op de Coul ELM. (2013). Hepatitis C prevalence in The Netherlands: migrants account for most infections. Epidemiol Infect 141: 1310-1317.
- Vriend, H.J., Op de Coul, E.L., Van de Laar, T.J., Urbanus, A.T., van der Klis, F.R., and Boot, H.J. (2012). Hepatitis C virus seroprevalence in The Netherlands. Eur J Public Health.
- VVD and PvdA (2012). Regeerakkoord VVD-PvdA: Bruggen slaan. Rijksoverheid, Den Haag.
- Wisselink, D.J., Kuijpers, W.G.T., and Mol, A. (2013). Kerncijfers Verslavingszorg 2012: Landelijk Alcohol en Drugs Informatie Systeem (LADIS) [Key Figures Addiction Care 2012: National Alcohol and Drugs Information System (LADIS)]. Houten, The Netherlands: Stichting Informatie Voorziening Zorg (IVZ) [Foundation for the Provision of Care Information].
- Wisselink, J. (2013). Treatment demand crack trends in the Netherlands [Paper presented at the EMCDDA week on 'measuring, understanding and responding to drug problems in Europe' 23-27 September 2013]. EMCDDA, Lissabon.
- Wouters, M., Doekhie, J., Korf, D., and Benschop, A. (2010). Gezondheidsrisicogedrag onder mannelijke gedetineerden: tatoeages, piercings, boegroes, seks & injecteren van drugs en anabolen. Rozenberg Publishers, Amsterdam.

## 11.2 Alphabetic list of relevant data bases

Amsterdamse cohortstudie, Amsterdam Cohort Study

Local cohort study on mortality among methadone clients registered at the CMR (see below), conducted by the Municipal Health Service Amsterdam.

Homepage: www.ggd.amsterdam.nl.

### Antenne (Amsterdam Antenna)

Local monitor of the use of alcohol, tobacco, and drugs by school-goers and socialising young people in Amsterdam, conducted by the Bonger Institute of the University of Amsterdam (UvA). Homepages: www.jur.uva.nl & www.jellinek.nl.

#### Causes of death statistics

National registration of causes of death, that is the Dutch General Mortality Register (GMR), including deaths due to drugs, conducted by Statistics Netherlands (CBS). Homepage: www.cbs.nl.

CBS Politiestatistiek, Statistics Netherlands (CBS) Police Statistics

National registration of the number of police reports on offences against the Opium Act, conducted by Statistics Netherlands (CBS). Homepage: www.cbs.nl.

Cliënt Volg Systeem Amsterdam, Client Monitoring System, Amsterdam

Local registration system of treatment given by the Municipal Health Service, Addiction Care, and Public Mental Health Care, including treatment for drug users. Homepage: www.ggd.amsterdam.nl.

Cliënt Volg Systeem van Stichting Verslavingsreclassering Nederland, Client Monitoring System of the Foundation of Addiction Probation Services

National registration of probation services offered to drug using offenders, conducted by the Foundation of Addiction Probation Services. Homepage: www.ggznederland.nl.

CMR, Centrale Methadon Registratie, Central Methadone Register (CMR)

Local registration of methadone substitution treatment, conducted by the Municipal Health Service Amsterdam. Homepage: www.ggd.amsterdam.nl.

CPA, Centrale Post Ambulancevervoer, Central Post for Ambulance Transports (CPA) Local registration of ambulance transports, including transport due to problem use of alcohol and drugs, conducted by the Municipal Health Service Amsterdam. Homepage: www.ggd.amsterdam.nl.

Database problematische harddrugsgebruikers 2008, Data base problem hard drug users 2008

Data base about a field sample of 572 socially marginalized problem hard drug users. This database is a compilation of databases supplied by the Municipal Health Service Amsterdam, the Addiction Research Institute Rotterdam (IVO) and Bureau INTRAVAL.

DIMS, Bureau Drugs Informatie en Monitoring Systeem, Drugs Information and Monitoring System (DIMS)

National survey on the contents of synthetic drugs, conducted by the Bureau of the Drugs Information and Monitoring System (DIMS) at the Trimbos Institute. Homepage: www.trimbos.nl.

#### Educare monitor

National monitor on first aid given at house parties, including first aid for problem alcohol and drug use, conducted by Educare Ambulant, Foundation of Nursing & Education Consultancy. Homepage: www.educaregroningen.nl.

### Haags Uitgaansonderzoek

Local monitor on the use of alcohol and drugs by young people in the nightlife scene (16-35 years) in The Hague, conducted by the Research Committee on Monitoring & Registration (MORE). Homepage: www.denhaag.nl/.

#### HBSC, Health Behaviour in School-Aged Children

National monitor on the physical and mental health and well-being of school-aged children, including high-risk use of cannabis, conducted by the Trimbos Institute, Radboud University Nijmegen, and Utrecht University. Homepages: www.trimbos.nl & www.hbsc.org.

HIV/aids-registratie, HIV/AIDS Registration

National reporting system for diagnoses of HIV and AIDS assessed by doctors, including HIV and AIDS due to injecting drug use, conducted by the HIV Monitoring Foundation (SHM). Homepage: www.hiv-monitoring.nl.

## HIV-surveillance among drug users

Local surveys in different cities of HIV-infection among injecting drug users, conducted by the National Institute of Public Health and the Environment (RIVM) and the municipal health services. Homepage: www.rivm.nl.

## Inbeslagnames drugs, Drug Seizures

National registration of drug seizures, conducted by the Research and Analysis Group of the National Criminal Intelligence Service of the National Police Agency (O&A/dNRI/KLPD). Homepage: www.politie.nl/KLPD/.

LADIS, Landelijk Alcohol en Drugs Informatie Systeem, National Alcohol and Drugs Information System (LADIS)

National registration system of addiction care and treatment, conducted by the Organisation Care Information Systems (IVZ). Homepage: www.sivz.nl.

Landelijke Jeugdmonitor CBS-SCP (POLS), National Youth Monitor CBS-SCP (POLS)

National monitor on the living conditions of young persons (12-29 years), including drug use, conducted by Statistics Netherlands (CBS) and the Social and Cultural Planning Office of the Netherlands (SCP). Homepage: www.cbs.nl.

LIS, Letsel Informatie Systeem, Injury Information System (LIS)

National survey on injuries treated at emergency departments of hospitals, including injuries due to alcohol and drugs, conducted by the Consumer Safety Institute. Homepage: www.veiligheid.nl.

LMR, Landelijke Medische Registratie, Dutch Hospital Data (DHD)

National registration of admissions to hospitals, including admissions due to problem alcohol and drug use, conducted by Prismant. Homepage: www.prismant.nl.

Monitor gedoogde coffeeshops, Monitor of tolerated coffee shops

National monitor of the number of coffee shops that are officially tolerated by the local municipal policy, conducted by Bureau Intraval. Homepage: www.intraval.nl/.

Monitor veelplegers (ISD), Monitor habitual offenders (ISD)

National registration of suspects and convicts who repeat the offence, including offences against the Opium Act, conducted by the Research and Documentation Centre (WODC) of the Ministry of Security and Justice. Homepage: www.wodc.nl/.

National Security Monitor, Veiligheidsmonitor Rijk (VMR)

National monitor on the experiences of citizens with crime and security and their opinion about police action, conducted by the Ministry of the Interior and Kingdom Relations (BZK). Homepage: www.minbzk.nl/.

NEMESIS II, Netherlands Mental Health Survey and Incidence Study

Second national cohort study on the general population (16-64 years) focussing on mental disorders including the abuse of and dependence on alcohol and drugs, conducted by the Trimbos Institute. Homepage: www.trimbos.nl.

#### NL.Trendwatch

National qualitative panel monitor on the use of alcohol and drugs by young people in the nightlife scene, conducted by the Bonger Institute of the University of Amsterdam (UvA). Homepage: www.jur.uva.nl/criminologie.

NPO, Nationaal Prevalentie Onderzoek, National Prevalence Survey (NPO)

National survey on the use of alcohol and drugs in the general population aged 12 years and older, conducted by the Addiction Research Institute Rotterdam (IVO). Homepage: www.ivo.nl.

NVIC Monitor, Nationaal Vergiftigingen Informatie Centrum, National Poisons Information Centre (NVIC)

National registration of information requests for poisonings, conducted by the National Institute of Public Health and the Environment (RIVM). Homepage: www.rivm.nl.

OBJD, Onderzoeks- en Beleidsdatabase Justitiële Documentatie, Research and Policy Database Judicial Documentation (OBJD)

National registration of criminal cases registered at the Public Prosecutions Department (OM), including offences against the Opium Act, conducted by the Research and Documentation Centre (WODC) of the Ministry of Security and Justice. Homepage: www.wodc.nl/.

#### OCTA, Organised Crime Threat Assessment

National survey on organised crime, including offences against the Opium Act, conducted by the Research and Analysis Group of the National Criminal Intelligence Service of the National Police Agency (O&A/dNRI/KLPD). Homepage: www.politie.nl/KLPD/.

OGGZ Monitor Amsterdam, Public Mental Health Care Monitor Amsterdam Local monitor on marginalized inhabitants of Amsterdam including problem drug users, conducted by the Municipal Health Service Amsterdam (GGD Amsterdam). Homepage: www.ggd.amsterdam.nl.

OMDATA, Openbaar Ministerie Data, Public Prosecutions Department Data (OMDATA) National registration of criminal cases registered at the district courts, including offences against the Opium Act, conducted by the Office of the Public Prosecutions Department. Homepage: www.wodc.nl/.

Peilstationsonderzoek scholieren, Dutch National School Survey (sentinel stations) National survey on alcohol and drug use among pupils (10-18 years), conducted by the Trimbos Institute and the Municipal Health Services. Homepage: www.trimbos.nl.

### Police Records System (HKS)

National identification system for the police, including drug use of suspects, conducted by the Research and Analysis Group of the National Criminal Intelligence Service of the National Police Agency (O&A/dNRI/KLPD). Homepage: www.wodc.nl/.

#### **THC-monitor**

National monitor on the concentration of THC in cannabis products sold in coffee shops, conducted by the Bureau of the Drugs Information and Monitoring System (DIMS) at the Trimbos Institute. Homepage: www.trimbos.nl.

TULP/GW, Ten UitvoerLegging van vrijheidsbenemende straffen en maatregelen in Penitentiaire inrichtingen, Execution of detentions in penitentiaries (TULP/GW) National registration of detentions, including detentions for offences against the Opium Act, conducted by the Judicial Detention Service (DJI). Homepage: www.dji.nl/.

### 11.3 List of relevant internet addresses

This list contains only a selection of Dutch websites on the subject of substance use.

#### **URL Websites**

#### Research institutes

http://www.trimbos.nl/

http://www.wodc.nl

http://www.intraval.nl

http://www.aiar.nl/

http://www.ivo.nl/

http://www.scp.nl/

http://www.nispa.nl/

http://www.rivm.nl/

http://www.sivz.nl/

http://www.prismant.nl/

http://www.zonmw.nl/

http://www.hiv-monitoring.nl/

http://www.jur.uva.nl/criminologieuk

http://www.drugresearch.nl/

## Ministries/ governmental organisations

http://www.rijksoverheid.nl/ministeries/vws

http://www.rijksoverheid.nl/ministeries/venj

http://www.rijksoverheid.nl/ministeries/bzk

http://www.om.nl/vast\_menu\_blok/english/

http://www.politie.nl/KLPD/

https://www.riecnet.nl/

http://www.hetccv.nl/english

http://www.cbs.nl/

### Online information and care websites

http://www.drugsinfoteam.nl/

http://www.unitydrugs.nl

http://www.drugsinfo.nl/

## (Addition) Care institutes

http://www.ggznederland.nl/

http://www.ggd.nl/

http://www.boumanggz.nl/

http://www.brijder.nl/

http://www.jellinek.nl

http://www.centrummaliebaan.nl/

http://www.vnn.nl/

http://www.parnassia.nl

http://www.novadic-kentron.nl/

http://www.tactus.nl/ http://www.ggznml.nl/

http://www.mondriaan.eu/home/

http://www.emergis.nl/

http://www.gezond.amsterdam.nl/

http://www.castlecraig.nl/

http://www.rodersana.nl/en/home/ http://www.addiction-solutions.nl/

## 12 Annexes

# 12.1 List of tables and graphs used in the text

Clinical admissions to general hospitals in 2013 related to cannabis, cocaine, opiates, and psychostimulants
Number and characteristics of recorded HIV infections by route of transmission
Number and percentage of recorded AIDS patients and deaths, by route of transmission
Characteristics of emergencies registered by the Monitor drug-related emergencies (MDI) by medical service, 2013
Opium Act reports by the Police by drug type (hard-soft), 2005-2013
Opium Act cases registered by the Public Prosecutor by drug type (hard-soft) 2005-2013
Decisions by the Public Prosecution in Opium Act cases, 2005-2013
Number of court sentences for Opium Act cases by drug type, 2005-2013
Size of the population of criminal justice detainees and Opium Act detainees (numbers and %), 2006-2013, reference date 30 September
Types of crime of suspects classified by the Police as drug users, 2005-2013
Types of assistance offered by addiction probation services and number of times activities within each type was carried out, 2010-2012
Percentage of offenders in different regimes under the Measure of Placement in an Institution for Habitual Offenders, 2009-2012
Number of dismantlements of cannabis cultivation sites, 2005-2013
Content of tablets sold as 'ecstasy' based on laboratory analyses
Prices (in €; mean and range) of drug samples delivered to DIMS in 2008 - 2013

## **Figures**

- Figure 2.1: Pupils' (12-16 years) lifetime and last year cannabis use between 2001 and 2013, and last month prevalence between 2003 and 2013 by gender
- Figure 5.2.1: Flow chart for the flow of the addiction clients through the three echelons.
- Figure 5.3.1: Proportion of clients subscribed in the registration between 2004 and 2013 at the institutes for addiction treatment by primary drug
- Figure 5.3.2: Clients subscribed in 2013 at addiction treatment centers by primary drug and age group
- Figure 5.3.3: Gender distribution by primary drug of clients subscribed in 2013 at centers for addiction treatment
- Figure 5.3.4: Number of admissions to general hospitals related to opiates, cannabis, cocaine, and psychostimulants, as primary diagnosis (top panel) or secondary diagnosis (bottom panel), from 2004 to 2013
- Figure 6.2.1: Yearly HIV-incidence of injecting drug users (IDU) (≤30 years at entry) and all drug users (DU) included in the Amsterdam Cohort Studies, 1985-2013
- Figure 6.4.1: Number of acute drug-related deaths in the Netherlands according to the EMCDDA selection of ICD-10 codes from 1996 up to including 2012
- Figure 6.4.2: Trends in the age distribution of cases of acute drug-related deaths in the Netherlands, according to the EMCDDA definition, from the period 1991-1995 up to including the period 2006-2012
- Figure 6.4.3: Number of acute deaths (overdoses) among drug users in Amsterdam from 2004 to 2013
- Figure 7.2.1: Number of syringes exchanged in Amsterdam and Rotterdam 2002-2013
- Figure 9.1.1: Type of sanctions in Opium Act cases imposed by the Courts, hard and soft drug cases, 2001-2013
- Figure 9.1.2: Percentage of detainees for Opium Act offences compared to other categories of offences, September 30, 2013
- Figure 9.3.1: Number of offenders under the Measure of Placement in an Institution for Habitual Offenders (ISD'ers), January 2005-December 2013
- Figure 10.3.1: Average concentration of MDMA in tablets sold as ecstasy
- Figure 10.3.2: Average concentration of amphetamine and caffeine in speed samples
- Figure 10.3.3: Percentage of powders sold as cocaine also containing medicines
- Figure 10.3.4: Average THC percentage in cannabis products
- Figure 10.3.5: Trends in average prices per gram of different types of cannabis

#### 12.2 List of abbreviations used in the text

4-MA 4-methylamphetamine

ACS Amsterdam Cohort Studies

ACT Assertive Community Treatment

ADHD Attention-Deficit/Hyperactivity Disorder

AIAR Amsterdam Institute for Addiction Research
AIDS Acquired Immune Deficiency Syndrome

ASI Addiction Severity Index

BIBOB Public Administration Probity Screening Act

BMK Benzyl-Methyl-Keton

BZK Ministry of the Interior and Kingdom Relations

BZP 1-benzylpiperazine

CAM Coordination Centre for the Assessment and Monitoring of New Drugs

CAPI Computerised Assisted Personal Interview

CASI Computer Assisted Self-Interviewing

CBD Cannabidiol

CBS Statistics Netherlands

CBT Cognitive Behavioural Treatment

CBO Dutch Insitute for Health Care Improvement
CBZ Board of Construction of Facilities for Hospitals

CCBH Central Committee on the Treatment of Heroin Addicts

CCV Netherlands Centre for Crime Prevention and Community Safety

CDC Centres for Disease Control

CIA Cannabis Intelligence Amsterdam

CIDI Composite International Diagnostic Interview

CMR Central Methadone Registration

CPA Central Post for Ambulance Transports
CRA Community Reinforcement Approach
CVGU Centre Safe and Healthy Nightlife
DBC Diagnosis Treatment Combinations

DHD Dutch Hospital Data
DIL Drugs Information Line

DIMS Drugs Information and Monitoring System

DJI Department of Judicial Institutions

DNR National Crime Squad

DNSSSU Dutch National School Surveys on Substance Use

DOB 2,5-dimethoxy-4-bromoamphetamine

DSM Diagnostic and Statistical Manual of Mental Disorders

DUTCH-C Drug Users Treatment for Chronic Hepatitis C

E.K. Senate

EMCDDA European Monitoring Centre for Drugs and Drug Addiction

EU European Union

FACT Function Assertive Community Treatment

FIOD Fiscal Intelligence and Investigation Department

GBL Gamma-butyrolacton
GGD Municipal Health Service
GG&GD Area Health Authority
GGZ Mental Health Service
GHB Gamma-hydroxy-butyrate
GMR General Mortality Register

HAART Highly Active Anti-Retroviral Treatment

HAT Heroin-assisted treatment

HAVO Secondary education at middle level

HBV Hepatitis B virus

HBSC Health Behaviour in School-aged Children

HCV Hepatitis C virus

HIV Human Immune Deficiency Virus

HKS Defendant Recognition System (of the Police)

HTN Healthy Nightlife Toolbox

ICASA International Collaboration on ADHD and Substance Abuse

ICD International Classification of Diseases, Injuries and Causes of Death

ICT Intensive Community-based Treatment
IDDT Integrated Dual Disorder Treatment

IDUs Injecting Drug Users
IGZ Health Care Inspectorate
IMC Inpatient Motivation Centre

ISD Institution for Habitual Offenders

IVO, scientific bureau on lifestyle, addiction and related social developments

IVZ The Foundation for the Provision of Care Information

KLPD National Police Agency

LADIS National Alcohol and Drugs Information System

LCI National Coordination Structure on Infectious Diseases

LCMR National Board for Substance Registration

LEDD National Centre of Expertise on Double Diagnosis

LIS Injury Information System

LMR National Information System on Hospital Care and Day Nursing

LSD D-Lysergic acid diethylamide

LSP National Support Centre for Prevention

LTP LifeTime Prevalence

LMP Last Month Prevalence
LYP Last Year Prevalence

MATE Measurement of Addiction for Triage and Evaluation

MBDB N-methyl-1-(3,4-methylenedioxyphenyl)-2-butanamine

mCCP Meta-chloro-phenyl-piperazine MDA Methylene-dioxyamphetamine

MDEA Methylene-dioxyethylamphetamine
MDFT Multi Dimensional Family Therapy
MDI Monitor drug-related emergencies

MDMA 3,4-methylene-dioxymethamphetamine
MIM Multivariate (Social) Indicator Method

MSM Men having Sex with Men NDM National Drug Monitor

NEMESIS Netherlands Mental Health Survey and Incidence Study

NHG Association for General Practitioners

NIGZ National Institute for Health Promotion and Disease Control

NIVEL Netherlands Institute for Health Services Research

NNIA No new information available

NND National Network Drugs Expertise

NPO National Drug Use Survey/National Prevalence Survey

NPP National Prevention Program

NVIC National Poisons Information Centre

OBJD Justice Documentation Research Database

OCTA Organised Crime Threat Assessment

OMC Office of Medicinal Cannabis

OMDATA Public Prosecution Department Data

PMA Paramethoxyamphetamine PMK Piperonyl-Methyl-Keton

PMMA Para-Methoxymethamphetamine
PPC Penitentiary Psychiatric Centres
RDS Respondent Driven Sampling

RIEC Regional Information and Expertise Centres

RIOB Guideline on Methadone Maintenance Treatment

RISc Risk Assessment Scales

RIVM National Institute for Public Health and the Environment

ROM Routine Outcome Monitoring

SCP National Institute for SocioCultural Studies

SES Socioeconomic Status

SHM HIV Monitoring Foundation
SOV Judicial Treatment of Addicts

SRM Criminal Justice Monitor

STI Sexually Transmitted Infections

SVO Steering Committee for the Reduction of Nuisance

SVG Addiction Probation Services

SWOV Institute for Road Safety Research

TBC Tuberculosis

TDI Treatment Demand Indicator

THC Tetrahydrocannabinol

T.K. Lower House of Parliament

TM Treatment Multiplier

TRAILS Tracking Adolescents Individual Lives' Survey

HFAO High-frequent Adult Offenders
VBA Drugfree Addiction Support Unit

VNG Association of Netherlands Municipalities
VVGN Dutch Association of Addiction Physicians

VWO Secondary education at the higher level, pre-university education

VWS Ministry of Public Health, Welfare and Sport

WHO World Health Organisation

WODC Research and Documentation Centre of the Dutch Ministry of Security and

**Justice** 

WTZi Admittance of Care Institutions Act

XTC Ecstasy

ZonMw Netherlands Organisation for Health Research and Development

## 12.3 List of full references of laws in original language (with link)

- Opiumwet: <a href="http://wetten.overheid.nl/BWBR0001941">http://wetten.overheid.nl/BWBR0001941</a>
- Wet Victor: http://wetten.overheid.nl/BWBR0013719
- Uitvoeringsregeling Opiumwet: <a href="http://wetten.overheid.nl/BWBR0014569">http://wetten.overheid.nl/BWBR0014569</a>
- **Opiumwetbesluit**: <a href="http://wetten.overheid.nl/BWBR0014405">http://wetten.overheid.nl/BWBR0014405</a>
- Beleidsregels bestuurlijke boete Opiumwet: <a href="http://wetten.overheid.nl/BWBR0027767">http://wetten.overheid.nl/BWBR0027767</a>
- Penitentiaire Beginselenwet: <a href="http://wetten.overheid.nl/BWBR0009709">http://wetten.overheid.nl/BWBR0009709</a>
- Uitvoeringsbesluit voorwaardelijke invrijheidstelling: http://wetten.overheid.nl/BWBR0024029
- Plaatsing in een inrichting voor stelselmatige daders (ISD): http://wetten.overheid.nl/BWBR0017012
- Wet Voorkoming Misbruik Chemicaliën: http://wetten.overheid.nl/BWBR0007286
- Wijzigingswet Wet voorkoming misbruik chemicaliën, enz. (handel in drugsprecursoren): http://wetten.overheid.nl/BWBR0019523
- Mandaatregeling Wet voorkoming misbruik chemicaliën 2006: <a href="http://wetten.overheid.nl/BWBR0019984">http://wetten.overheid.nl/BWBR0019984</a>
- Wet bevordering integriteitsbeoordelingen door het openbaar bestuur (Wet Bibob): http://wetten.overheid.nl/BWBR0013798
- Besluit Bibob: http://wetten.overheid.nl/BWBR0014964
- Zorgverzekeringswet: <a href="http://wetten.overheid.nl/BWBR0018450">http://wetten.overheid.nl/BWBR0018450</a>
- **Geneesmiddelenwet**: <a href="http://wetten.overheid.nl/BWBR0021505">http://wetten.overheid.nl/BWBR0021505</a>
- WetMaatschappelijke Ondersteuning (WMO): <a href="http://wetten.overheid.nl/BWBR0020031">http://wetten.overheid.nl/BWBR0020031</a>
- Interimbesluit Forensische Zorg http://wetten.overheid.nl/BWBR0029333
- Algemene Wet Bijzondere Ziektekosten: <a href="http://wetten.overheid.nl/BWBR0002614">http://wetten.overheid.nl/BWBR0002614</a>
- Wegenverkeerswet: <a href="http://wetten.overheid.nl/BWBR0006622">http://wetten.overheid.nl/BWBR0006622</a>
- **Gemeentewet**: http://wetten.overheid.nl/BWBR0005416
- Drank- en Horecawet: http://wetten.overheid.nl/BWBR0002458
- Wet Publieke Gezondheid: http://wetten.overheid.nl/BWBR0024705
- Wet Verplichte Geestelijke Gezondheidszorg (in preparation)

# Map of the Netherlands: provinces and major cities

# The Netherlands

